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To the Young Doctor

THIS number of CLINICAL MEDICINE will be read by many men who are just being graduated from the medical colleges of this country. We welcome them —you—into the greater "school of hard knocks."

The field which you are entering is a crowded one. In this country there is an average of one physician to every six hundred people, and this, according to President Pritchett of the Carnegie Foundation, means three times as many doctors as the country needs. Yet, in spite of the higher quality of preliminary education now required, the lengthening courses of professional instruction, and the restrictions placed upon candidates by our state boards of medical examiners, the proportion of physicians to population is increasing instead of diminishing.

Yet there is no reason why the young doctor should be discouraged. Competition is the law of life, and here as in anything else "the best man wins." You have a better preparation for the practice of medicine than we older fellows had when we left college ten, twenty or forty years ago. Many of you will have the added advantages of hospital experience, and while the first

few years may be expected to be years of struggle, in the long run, if you "stick," the old guard must step aside and you will take their place.

Discouraged you are bound to be. In pursuing your profession you will tread no primrose path, and many of your number are bound to fall by the wayside, or stray into other more alluring callings. But if you "stay with it," and are prepared to give the people what they want and what they need, you will make good.

What shall I do for the sick man? That is the great problem. The doctor who can solve it to the satisfaction of his patients is assured of success. The man who makes no attempt to solve it, who has little interest in it, no matter how fine his education may be, has little chance of getting on in the world as a practician of medicine. However great your interest in scientific problems, these alone will not afford a livelihood to one man in a hundred.

Mark Twain modified an old proverb into new form when he said: "Put all your eggs into one basket—and watch that basket." Your business is to cure sick people. Keep that thought ever in your mind. Concentrate your energies upon it.

As a *practician* of medicine every other activity of your life should be subservient to this one. Medicine is an intensely practical profession. Never forget this.

Therefore, start right. Lay aside preconceived ideas about this disease or that drug. Study your patients as well as your books. Keep your brain-cells active in the search for new and practical ideas; yet do not despise the old. From this time you must stand on your own feet.

With this introduction we welcome you into our brotherhood. Come in and make yourself at home! Welcome also to the "Clinic family"—those who read and love CLINICAL MEDICINE, which exists only to be of service to you. Join with others in making your journal better. Read it closely, criticise it freely. Make it the receptacle for your own experiences. You are the man of tomorrow. We shall look to you.

The time to collect is when a patient realizes his need, not when a doctor needs to realize.—"American Medicine."

BYRON ROBINSON

It is with profound regret that we announce the death, on March 23 last, of Dr. Byron Robinson of Chicago, from disease of the kidney. He was only 53 years of age.

For many years Dr. Robinson was a frequent contributor to these pages. We published some of his books. Our readers all feel, I am sure, that they know him intimately, for few men have contributed so voluminously to the literature of our profession. He did a vast amount of original research work, more I believe than any other contemporary physician, and it was begun at a period when it was not popular nor appreciated. To Dr. Robinson it was a passion. It absorbed all the time that he could spare (yes, more than he could spare) from the practice of his profession, and it involved the outlay of thousands of dollars. The dissecting room was no charnel-house for him; it was a work-room which he entered with joy and left with regret.

Dr. Robinson was the author of two volumes on intestinal surgery and four on gynecologic subjects. His "Abdominal Brain" is a classic, and I believe in the test of time will remain one. The little volume, "The Vagina and Perineum," which we published, is one of the most practical works of its kind. All of his books are filled with original thought and enriched by patient investigation. I remember that the last time I met Dr. Robinson he told me with some pride of the increasing number of his anatomical discoveries which had received recognition in Gray's "Anatomy."

Shortly before his death Dr. Robinson presented his splendid medical library to the University of Wisconsin, his *alma mater*. He was preparing for the end, like the brave, thoughtful man that he was. He will be remembered and his work will live.

PROFESSIONAL PUPERILITY

Djever stub your toe? Yes, and how you did cuss the darned stone. But the dornick lay exactly where it was, and never said a word.

Molly had a new hat and expected to go to church Easter morning; and behold how the rain poured down. Molly gazed out and energetically muttered the feminine substitute for swearwords. And the rain came down from heaven and fell alike on the just and the unjust, freshening the air and awaking to activity the dormant powers of Nature, completing the grand cycle on which depends the continuance of animate life.

The driver overslept, hurried his horses out before they had finished their feed, and the overloaded truck stuck in a mudhole. How the man did swear and abuse his beasts!

The Trust magnate concentrated his whole forces on his scheme, labored all day and far into the night, snatched food when and where he could, kept awake with coffee, secured sleep with morphine, and worked on whisky; and one day he fell in a uremic spasm. And the night succeeded the day, and the summer alternated with the winter,

and the sun that had pierced the clouds of the carboniferous epoch sailed across the sky, while he lay on his bed and cursed the universe.

Worse yet, and still more childish—Doctors Alpha, Zeta, *et al.*, plunge their hands into the grab-bag and clutch a handful of medicines, fling them at the patient, and because the result of medication with uncertain and doubtful remedies must be uncertain and doubtful, they cuss the drugs.

The boy who hammers his thumb and viciously kicks the hammer is excusable—he is only a boy.

In every form of matter there are certain inherent qualities. To ascertain these and so manage them as to make them useful constitutes Civilization. So we cultivate the soil and improve food-plants; we wrest from ores the metals; we harness the powers of nature to our car; we apply our knowledge and intelligence to everything that may be made useful to us—excepting drugs. These we condemn unreservedly because we are too ignorant and too awkward to apply them successfully.

The question in a near-syllogism:

Drugs are substances that exert some influence over the functions of the human body.

Disease presents disorder of the bodily functions.

Apply the remedy that exactly restores the affected function to normal activity and the disease ceases.

The gist of the matter lies in knowing exactly the disorder and the remedy that exactly obviates it, and applying the remedy with exactitude. What else is the practice of medicine?

Exactness is the key to the situation.

"Aha! Now we've got you! What remedy will you give to cure cirrhosis of the liver and build new cells?"

None. We are only men, not gods. The difficulty is that you come in too late, and what you call the disease is only the end-process of a long series, "the ashes of a burnt-out fire." You should have commenced long before, when there was as yet simply a disorder of the hepatic function

without material lesions, and if you had stopped the malady then there would never have been any cells lost.

The trouble is that you have not been practising medicine but pathology. Your studies have been in the dead-house instead of the sick-chamber; in printed books rather than in the book of Nature. You are unable for this reason to detect the beginnings of disease, when as yet a cure is possible. You stand with the chemist who stops with inorganic chemistry and balks at organic. You may be able to state the chemical constituents of wood, but any woman who loves flowers will beat you out of your boots raising them, even though she may not be able to read or write. Possibly this may apply to the attendance on the sick. Are you *sure* it doesn't?

"Yes, but when you select one alkaloid out of a plant you lose the rest. There are other values in it that are wasted."

How men cling to superstition and mystery. How hard it is to come out into the light of day, to plant the feet on the firm ground of knowledge. There are other values in the plant—very well; get them out and let us examine them, try them out, ascertain their actions and uses and apply them intelligently.

The reason this is not done is the Power of the Rut. Men have been accustomed to administer a drug, and somehow the patient gets well. Just how or why they do not know—but he gets well, and there they stop. And so for ages hyoscine was muffled in henbane, and arbutin strangled by tannin, and gelseminine enveloped in jasmine, and men timorously "tried" these and other drugs, ready at the first evidence of danger to stop and "try" something else—and they thought they were practising medicine!

The more carefully we study disease in the sick-room, in the living patient, the earlier we must learn to recognize diseases and the more effective will be our treatment as we apply at an earlier period the exact remedies that will correct the evils. These truths are axiomatic; they are not debatable. The facts and the deductions can not be

questioned. One argument remains—the appeal to prejudice.

"You are teaching eclecticism—the doctrine of specific diagnosis and specific medication!"

Are we men, scientific seekers after truth, earnestly, conscientiously endeavoring to fulfil the obligations of our noble profession and learn the best means of relieving the suffering and curing the sick? Or are we a pack of undisciplined brats, each crying vociferously, "I won't play unless I can be IT?"

"Let me know what goes on in a doctor's private office, and I will tell you if he is ethical. Let me know the business side of his practice, and I will tell you if he is honest. Let me see his diagnosis cards, and I will tell you if he is a sincere student of medical science. Let me see his treatment record, and I will tell you if he is a skilful practitioner."—"Doctor Betterman," in "The Office Practitioner."

THE VALUE OF THERAPEUTICS

In *The Washington Medical Annals* Roy discusses the value of therapeutics. He finds in current medical literature indications of a tide toward pharmacology. "A textbook on the practice of medicine that does not give a comprehensive therapy is a danger, if not a disgrace, to medical science. All great writers on medical practice have appreciated the importance of therapeutics." He quotes Latham and Sawyer to this effect, and adds, "There is no 'nux vomica and hope' about these statements. Names like typhoid fever and pneumonia seem necessary for classification, but how poorly they express the pathology!"

The three methods by which we determine the value of remedies are the clinical, the physiologic, and what we learn through the laws of physical chemistry of drug-action. Clinical experience is the means by which we verify the other two.

Niemeyer, a master of observation, wrote: "Digitalis in pure uncomplicated hypertrophy is unsuitable." Walshe said: "Of its danger in cases of mitral and tricuspid difficulty I entertain no doubt." Sawyer, whose clinical knowledge has been strengthened by a knowledge of the physiologic action

of digitalis, says: "I give digitalis when the veins and arteries point to its use, namely, when the veins are too full and the arteries not full enough, and the pulse is soft." Dr. Roy employs this illustration to show the value of the physiologic method in therapeutics.

The ionic method is based on the ionic, or electric, relation of drugs to the living tissues. Myers and Overton concluded that ether and chloroform narcosis were due to a union between the lecithin of the central nerve-cells and the volatile anesthetic, which destroyed temporarily the physiologic action of the central nerve-cells. Nerkling produced complete anesthesia in animals and then injected lecithin into the blood. They almost immediately regained consciousness. Biltz studied the action of ferric hydrate as an antidote for arsenic. He found colloid iron was electro-positive and arsenic electronegative. The union robbed arsenic of all toxic affinities for the tissues.

Pauli applied electrochemistry in his study of sodium sulphocyanide. He found the positive ions prevented the negative ions from precipitating protein, in this respect resembling the ion relation of sodium bromide and sodium iodide to protein. Sodium sulphocyanide was alternative and sedative. Testing this remedy clinically, he obtained from it excellent results in insomnia, arteriosclerosis, syphilitic headache, nervous disturbances of the menopause and the menses, also in neurasthenia. Roy finds the sulphocyanides particularly useful in the nervousness of the menopause and the monthly periods, also in lowering blood pressure. A case of insomnia of several months' standing was cured by it in two weeks. He also reports good results in neurasthenia.

Reicher is using cholesterol in pernicious anemia, while Ehrlich is using a special form of arsenic for the trypanosomes of sleeping sickness. T. C. Smith reports the citrate of iron and quinine his greatest aid in treating eczema in children.

Dr. Roy traces therapeutic skepticism to imperfection in the college instruction. He gives some interesting data in regard to his

experience in endeavoring to procure active digitalis. The druggist to whom he wrote for digitalis from assayed leaves stated that he had never been required before to use them. He was then told to use English leaves even if not assayed, but he had none. Other drugs found clinically inert as received from the druggist were cannabis indica, hyoscyamus, straphanthus, belladonna and physostigma; and "the sodium salicylate output in his prescriptions would make a dog sick." These things were found in Washington, D. C., the home of Dr. H. W. Wiley.

Dr. Roy takes the celebrated Council to task for recommending to physicians a "viburnum compound." The questions asked on therapeutics by some medical examining boards are neither scientific nor practical. He concludes as follows:

"I believe that therapeutics has a bright future before it. The works on the practice of medicine which only give diagnosis, pathology and therapeutic dabs will not endure. Physical chemistry, with its endless possibilities, has come to the aid of the clinical method and the physiological testing of drugs."

Two hundred years ago they said that the king could do no harm—and now they are making the same mistake about the majority.—"The Silent Partner."

ANTI-DISPENSING LEGISLATION IN THE OPEN

N. A. R. D. Notes comes out with a reply to our first "Miscellaneous" article of last month, entitled, "Trouble Ahead for the Dispensing Doctor." Naturally enough *Notes* sees "nothing wrong" with the Cullom bill and thinks that "no 'get together' physician who is willing to work with the pharmacist on a 'give and take' platform will find fault with it." If the "get together" (whatever that may be) has at heart the interests of his profession and his patients he certainly will object most strenuously, just as *Notes* would object, and vociferously too, if we should propose that every pharmacist who "pushed" any of the "57 different varieties" of A. D. S. specifics for all human ailments,

from falling hair to ingrowing toe-nails, should be subject to a fine of from \$500 to \$5000 or imprisonment for from one to five years.

How about it, Brother Carr? You object (theoretically) to the prescribing pharmacist; do you also take exception to his *pushing* (that's different, of course!) "pelvitone" and "kidney remedy", and other "A. D. S." preparations? You purpose to drive the dispensing doctor to the tall timber, and get a "corner" on all the patent-medicine business, through the "Syndicate," at the same time. Isn't this rather a "large order"—and what particular benefit does the doctor get out of it all?

With one thing that *Notes* says we heartily agree (though not with its English): "Truth and right are no respector of persons or interests." Why lug in a moral precept unless you are sure that it applies? You want to stop the doctor from dispensing because you hope that this will increase your business. Isn't this the principal reason? Honest, now!

The rule that should determine the physician in making the decision as to whether he shall dispense or prescribe is the patient's welfare. Whenever he believes that he can render better service by prescribing he certainly should prescribe; if experience shows him the contrary he should dispense. That's what "truth" and "right" will tell any man of common sense.

We have no quarrel with the druggist. He is the man to do the mixing and the compounding of drugs, when these things are to be done, and we have frequently advised our readers to establish good relations with him, and employ his services. He can and should be the dispensing doctor's source of supply for many things. This "get together" program would have much more of the right kind of spirit in it if there were more effort at mutual service, less talk of the legislative sand-bag, which is to be depended upon to fill somebody's pockets.

These proposed antidispensing laws are class legislation of the grossest character, and, in their tendency to hamper the phy-

sician in his practice, subversive of the highest interests of humanity.

Let those who have failed take courage,
Though the enemy seem to have won,
Though his rank be strong, if he be in the wrong,
The battle is not yet done.
For sure as the morning follows
The darkest hour of night,
No question is ever settled
Until it is settled right.

—Ella Wheeler Wilcox.

HARD-HITTING JOURNALISM

I always read W. J. Robinson's editorials. There is something in his style that reminds me of Roosevelt; also, something similar in the minds and methods of the two men. When Robinson has a thing to say he says it, without adjective trimmings, without apology for his opinions, and absolutely without fear as to consequences.

There is no "winding up" by way of introduction, no rhetorical climax. The typical Robinson editorial is a blow, right from the shoulder, always powerful, sometimes almost brutal in its forcefulness, but inevitably for the right, as Robinson sees it. There is no more strenuous force in medical journalism today than this many-minded man of *The Critic and Guide*, *Therapeutic Medicine*, *The American Journal of Urology*, and *The Medical Review of Reviews*. How can he cover all this ground and do everything so well?

Do you realize that Robinson has purchased, and is now editing and publishing, *The Medical Review of Reviews*? This has long been an excellent journal, but under the Robinson regime it has taken on new vitality. It is alive from cover to cover. The editorials are filled with fight and fire—and there are enough of them. There is not a dull page in the whole magazine; and yet it's "scientific" from beginning to end. There is something magnetic about it. A "live" man simply cannot pick it up without being attracted; cannot read it with indifference.

While there are many good medical journals—and they are really getting more

common—there is only one other that has an appeal equal to the revivified *Review*. Modesty compels me to withhold its name!

A STORY EVERY DOCTOR SHOULD PONDER OVER

Mr. Charles H. Goddard, secretary and moving spirit in the American Druggists' Syndicate, has recently sent out a little booklet to members of the medical profession, inviting them to purchase stock in the Syndicate, the remarkable growth and wonderful profit-possibilities of which are pointed out in a very attractive way.

In this booklet Mr. Goddard tells the following story:

"We recall an instance in a small town where a physician persisted in dispensing his own medicines, although there were two excellent prescription drugstores in the place. The druggist tried to show the physician that he was making a mistake in not sending his prescriptions to them to be filled, but he was stubborn and defiant, saying he would dispense as he pleased and he would like to see what they could do about it.

"The druggists held a conference and soon decided what they would do to teach the physician a lesson.

"They employed a bright and competent young physician to write free prescriptions and make free professional calls. It took only about three weeks to convince the first doctor on the ground that he would soon be starved out of the field if he did not make peace with the druggists. He went to them, acknowledged his error, promised to quit dispensing if they would cease their free-prescription policy, and they met him half-way. Today both the doctors and druggists are making a good living in that town. This is intended only as an illustration of what could be done by pharmacists in extreme cases, if they found it necessary, as it was in this instance."

How do you like it, Doctor? Think it over. We have no comments to offer. Same "Syndicate" that has gone, "wholesale," into the patent-medicine business

and now proposes to teach the dispensing doctor ethics.

CONCERNING OLD MEDICAL BOOKS

The Lancet-Clinic (Cincinnati) for January 8, page 32, has this to say on old medical books: "A factor which must be considered is the fallacious notion prevalent among physicians that only recent books on medicine are valuable, and that all recent books are filled with novelties that are useful. Nevertheless, many of the best medical books are twenty years old, and a few that every student and physician should read are older still. The great mass of material to be found in the library of a prosperous physician who has liberally attached his name to subscription blanks (viz., for new publications!) is trash of the most useless and worthless sort."

The apparent contradiction contained in this assertion is very easily cleared up if we keep in mind that the editor of *The Lancet-Clinic* condemns as trash and worthless a good part of the latest medical literature, many of the books, in sad truth, consisting merely of write-ups and rehashes from older works on the same subjects.

It is indeed true that many of the best medical books are twenty years old, and older. We would only call to mind Prof. von Ziemssen's "Cyclopedia of the Practice of Medicine," which, in the German original, was published in the seventies of the last century and which, except for the additions made necessary by later discoveries, is still as much an authority on the subjects covered as it was then. Who would deny the classical nature and lasting value of such works as Billroth's "Surgical Pathology," DaCosta's "Medical Diagnosis," Ziegler's "Pathology," and a host of other books which were authorities many years ago and are authorities still?

And that reminds us: A great many physicians read their weekly and monthly medical journals only very cursorily and at the end of the year send them to the attic, if not to the furnace. Can there be a greater mistake? Current medical litera-

ture—of the appropriate kind, *nota bene*—embodies the medical history of our own times, and it is from it that the textbooks are written. The latter cannot possibly work up all the valuable material contained in the many papers which are presented in journals, and this is lost to a great extent unless carefully read and made available for future reference by a proper index.

But to come back to old medical books, we maintain with *The Lancet-Clinic* that these same are by no means junk, and to be discarded. They are much rather a valuable source of information which the knowing ones among physicians make constant use of. While not much good can be said of many textbooks, unfortunately, which are ephemeral at best, still there are many indeed which are well worth preserving and studying over and over again.

"Many doctors of high rank are constant financial bamboozlers. Every move is a grand-stand play. Every case is a serious case. 'The call came in the nick of time.' Death flew out the back door as the Great Doctor entered the front. Every sore-throat is diphtheria; every belly-ache is appendicitis; every infected finger is blood-poison."—"Doctor Betterman," in "The Office Practitioner."

TO ERR IS HUMAN

At his clinic, one day, Nicholas Senn called several of the students down to the floor to make a diagnosis. One of them gave his opinion. Senn remarked that the diagnosis did not agree with that he himself had made, and then boomed out in his deepest tones: "The boy is right!"

Yes, but that was Senn.

Unfortunately, there are not many Senns, men big enough to do such an act of justice. It was a word that will send a thrill of pride, love and devotion through that boy's heart long after his hair has whitened and his boys have boys of their own.

How many of those who witnessed the scene carried away from it a remembrance that will embolden them to tell the truth and do justice to their fellows, even if it appears to be a detriment to themselves?

But why should it? Who among us dare lay claim to omniscience, to absolute in-

capability of error? When we are *very* young we feel that we must be always right; we resent the imputation of error, are wounded if our spelling or pronunciation of a word is criticized, and hate the fellow who corrected us. Advancing years bring a lowlier estimate of ourselves, and we are happy to line up with the average, rather pleased to be pronounced "not so worse." In fact, we begin to be rational when we "come down off our perch;" and the man who never does come down is an insufferable prig who is despised by everybody.

"To know thyself is the beginning of wisdom," said the ancient philosopher; and Kipling's hero "finds himself" when he realizes that he is a fool.

Emerson said: "A foolish consistency is the bugbear of little minds." How true it is. How certainly it stamps littleness on the man if he cannot come out manfully and say, "I was mistaken!" I once recommended a doctor to a friend. He looked at me with surprise and asked, "Do you consider *him* the most skilful doctor in town?" I replied: "No, but if he does not know he will tell you so, and give you a chance. The others won't." The man lived to the age of ninety-eight under that doctor's care.

Just now I am vastly amused at the squirming of some people who took sides in a controversy with all their might and now are trying to take it all back and line up on the right side and yet save their face. Some will not admit their mistake but still insist that the horse *was* sixteen feet high!

How easy it is to come out frankly and say, "I was mistaken. It was not my first mistake, and please God, I hope to live long enough to make plenty more." And you give him the grip of true appreciation and turn away feeling, "There's a *man*, all right."

Now, I'm not so big; in truth I am not near as big or as important as some folks think me; but I surely have learned the lesson of humility. A man came to me the other day and said he had detected an error in my work. He evidently expected it would be taken as the gage for battle, and

was ready to defend his position. I said to him: "Is that the worst error you have found in my work? Gee! I know of a hundred worse ones."

We parted with mutual liking and respect.

The Indian says that when a man kills a foe the strength of the slain enemy passes into the visitor's arm. In the weird fancy lies the truth. Each defeat leaves us weaker for the next battle, but each conquest makes us stronger. Nothing makes a prison to a human life but a defeated, broken spirit. The bird in its cage that sings all the while is not a captive.—J. R. Miller.

SOME THOUGHTS ON THE ROLE OF THE PHYSICIAN

I have no sympathy with those who limit the physician to a benevolent neutrality, making of him a mere spectator. Disease is a war in which it is the duty of the physician to come to the aid of nature. Few patients today have that surplus force that permits us to abandon them to themselves, and very few can afford the debility occasioned by loss of blood and too strict diet.

Take any acute inflammation; it is urgently necessary to cut the access and prevent its return. For even a simple inflammation has its access. By the fact of its violence it debilitates the vessels, paralyzes their coats, and from being hypersthenic soon becomes hyposthenic, the most dangerous form. Then, if one does not immediately give the indicated remedies in suitable doses, the gravest disorders are produced, which are attributed to the malady but which could have been prevented by appropriate treatment. The fact of illness contributes an indication for supportive treatment, since it shows that the vital powers were insufficient to resist the onslaught of disease.

Experience has demonstrated that the prescription of digitalin, aconitine and veratrine, when there is a marked exaggeration of pulse and temperature, acts marvelously while there is too marked a difference. Likewise strychnine is indicated when there is depression. Liquid medicines are only to be used as excipients or adjuvants. It is better not to mix active principles with liquids in stock, lest they may become en-

feeble or decomposed. Make your solutions at the bedside, to last till the next visit only.

The granule form is incontestably the most favorable for the preservation and portation of drugs. These may be administered dissolved in a teaspoonful of any agreeable liquid. The patient does not then dread the approach of the hour for taking medicine, and it is easier for the physician to follow the course of its activity.

Digestion is impaired or suppressed by acute disease, the organic activities being concentrated at the focus of the malady. The first stage of acute attacks having passed, the gastric atony must be relieved. The condition denoted by a coated tongue is removed by a dose of a laxative saline, and the stomach then usually resumes its functions. If not, we come to its aid with quassia, of which a small dose should be given in solution (water alone) before each meal. If the large bowel is impacted we have recourse to jalapin. On the reestablishment of the gastrointestinal functions depends convalescence, whether it will prove to be brief or prolonged.

Another question is as to sleep. Generally it is not well that the patient should doze by day, unless after prolonged insomnia. This cerebral flagging should be relieved by caffeine. Give a milligram of caffeine valerianate every quarter hour until he is wide awake. To secure repose at night, Burggraeve suggested that one may give near the end of the day a few milligrams of morphine. It is rare that this dose does not suffice. The patient passes a tranquil night and awakes with forces recuperated. The salts of opium do not present the inconvenience of the parent drug. If more was needed he was accustomed to add chloral. Beginning at 6 in the evening, he taught that we might give 3 or 4 milligrams of morphine every hour; if not asleep by 9 o'clock, to add a gram of chloral. As soon as the patient is up, and taking food and exercise, he needs no hypnotic. The dangers of morphine were not appreciated by Burggraeve, because he employed minute doses, and the habit had not received much attention when he began his work.

We demand much more careful and scientific treatment of insomnia now. If this is due to cerebral anemia, a cup of hot bouillon will induce sleep; or caffeine valerianate, a milligram every quarter hour, will meet this indication and aid the elimination of toxins. Nervous apprehension is dissipated by hyoscine if 1-10 milligram is given every half hour until "just enough" is taken. Pain and fever are best met by gelseminine, half a milligram every quarter hour; and this dissipates cerebral hyperemia. Solanine amply fills the place of the bromides, while spinal irritation and sexual activity are soothed by this or by cicutine hydrobromide, the dose of either being a milligram every half hour.

Thus it will be seen that, as with alcohol, every possible application of opiates may be replaced by one or other of the alkaloids, and that the latter will fill the need better, although no one of them will do so many things as does morphine.

Many maladies are prolonged by hunger. Let the patient eat if the tongue is clean and the breath pure. Nothing is worse than purgation during convalescence; the morning saline suffices. The selection of food is one of the occasions where the knowledge of the master is requisite.

Convalescents should not respire the same air as the sick. The patient should have a day-room and another for the night. Pure air is the food of life. As soon as the doctor leaves, the friends close the windows to shut out drafts. Better catch cold than be poisoned. The best way to avoid drafts is to open the windows wide. Go back into the room a few minutes after having said good-by; if the windows are all shut again, take out a sash and carry it home with you. That may make people realize your wishes.

PELLAGRA A DIATHESIS DUE TO THE ABSORPTION OF RANCID FAT

In *The Charlotte Medical Journal* for December, 1909, and for January, 1910, Dr. C. S. Pixley of Winnsboro, North Carolina, publishes the results of his interesting

studies on pellagra, which have led him to the conclusion that this condition is dependent upon the frequent and long-continued ingestion of rancid or infected fat; or also of fat which may have become rancid or infected *after* entering the stomach. From clinical data Dr. Pixley assumes that the symptoms depend upon the variety of microbes present which will flourish in the body-solids and fluids of a lowered alkalinity.

This hypothesis, the author claims, explains the distribution of the disease in many localities, among so many different classes of society, where the diet indeed is different, but the ignorant housewife or the careless servant permits the indefatigable houseflies to infect, with their feet, the butter and the lard. Dr. Pixley accuses the common housefly of being the active agent in spreading pellagra (by virtue of causing fats to turn rancid) as the mosquitoes do yellow fever and malaria, the rats and squirrels spread bubonic plague, dogs hog-cholera, and haired and furred pets diphtheria.

The author claims that the symptoms due to the absorption of rancid fats and their derivatives are those observed in pellagra; he has noted that pellagra patients avoid fat in their diet as being *a source of serious discomfort* (Italics ours.—ED.), and that some of them have learned to avoid corn also, for the same reason—a fact readily understood if we remember that a large percentage of corn is fat, sometimes approximately ten percent.

Rancid fat in the stomach leads to the formation of volatile fatty acids (principally butyric) which are not easily eliminated but saturate the body and must result in a general lessening of the alkalinity. The symptoms described by Dr. Lared (Brande and Taylor's "Chemistry," 1875) as following the experimental ingestion of butyric acid are those found in the early stages of pellagra. We expect to find a condition of reduced alkalinity, and that this actually does exist is shown by the fact that all these patients are free users of sodium bicarbonate, self-prescribed.

Dr. Pixley's studies have led him to assert the existence of a *pellagrous diathesis*, which

he defines as a condition of the organism in which all solids and fluids have been saturated with the volatile fatty acids. This condition will powerfully influence every later trouble, varying in its intensity from such active violence as to be the only apparent disease to modifications of other troubles, strong enough, when unrecognized, to defeat efforts for their cure. He has noticed this diathesis, among others, in two cases of intractable neuralgia of the fifth pair of nerves, both of which had been abandoned to the surgeons but yielded to treatment aided by "antipellagrous" measures.

His limited experience shows a pellagrous influence in troubles with the eye and ear, and he suggests that the specialists will do well to consider it most carefully. Alienists will find that this same influence may powerfully modify diseases coming within their department. As the other diatheses, or constitutional traits, when present, powerfully influence disease and treatment, so also, he thinks, will the pellagrous diathesis be found equally potent and far-reaching. The causes of the diathesis, besides hereditary influences, are listed as impure air, insufficient or improper food, defective sunlight, overwork, intemperance, and specific, tuberculous and malarial infection. This certainly, Dr. Pixley adds, includes "rancid fats," both animal and vegetable.

As for the treatment, Dr. Pixley very properly begins with a thorough cleaning out; podophyllin, juglandin, leptandrin, euonymin, or the laxative salines. This is followed up with the arsenites of copper and strychnine, the former to check decomposition; and with hyoscyamine to control intestinal pain. Then the sulphocarbonates are given, with other laxatives if necessary, until the digestive tract is as germ-free as it possibly can be made.

The diet must be free from hog-fat, hog-meat and corn. Shredded wheat, oatmeal, eggs, chicken, perfectly fresh buttermilk, and vegetables properly prepared are proper foods. If fat is needed, it is supplied in the form of oil inunctions. Alkaline baths give great comfort to the patient.

In the later stages as well as in chronic cases electric treatment may be of service, while, theoretically, arc-light baths will assist the blood to return to normal conditions.

"O powerful Goodness! bountiful Father! merciful Guide! Increase in me that wisdom which discovers my truest interest. Strengthen my resolutions to perform what that wisdom dictates. Accept my kind offices to thy other children as the only return in my power for thy continual favors to me."—Benjamin Franklin's prayer.

MODERN MIRACLES

Who says the day of miracles has passed! Before you rashly commit yourself in assenting to this proposition, get *The Sunday Telegram* of Worcester, Mass., and read the astounding statements at the top of the first page. From this we learn that Mrs. C. D. Sweet "has made one of the greatest cancer discoveries ever known." At least Mrs. Agnes Dubois says so, and who can doubt Mrs. Agnes Dubois' capability of judging of such matters. She knows, because Mrs. Sweet discovered two cancers in her, "One on the liver which was caused through gallstones, one in her intestines which was caused by constipation and piles." Moreover, Mrs. Sweet has in her office, in sixteen bottles, the cancer of the liver and the cancer of the intestines, which she is prepared to produce for the public to inspect at any time.

The miracle of it, however, lies in the fact that the cancers were removed and placed in the sixteen bottles without the use of drugs or operation. Just how she induced those cancers to leave the patient's body and enter the bottles is not stated; that is probably one of her secrets. Whether they came out *per vias naturales* or directly through the skin, but without operation, is not revealed. Besides this, Mrs. Dubois was relieved of 212 gallstones.

Another lady, whose testimony could not be doubted for a moment, states that Mrs. Sweet cured her paralysis by massage and the use of liniments, made by the latter lady. But since all cures are effected without the use of drugs, we have here another

miracle, i. e., the manufacture of liniments without drugs.

The same versatile lady cures little boys of attacks of insanity, and guarantees to break up any case of appendicitis without operation. Since the reports appear to show that massage is her principal weapon, one may imagine what happens when this accomplished lady gets hold of a case of real appendicitis. The lady's picture accompanies the advertisement, and is probably a good portrait. The face looks like that of a woman who would promise anything, try anything, without the slightest hindrance from a consciousness of her own ignorance, but with assurance enough to win the confidence of such feeble-minded individuals as the patients whose faces are also portrayed in the same advertisement.

Massachusetts ought to have laws to prevent such people preying upon the ignorant public.

The most significant thing in this, however, is the testimony it gives to the desire of very many people to obtain cures without resort to the knife or drugs. By drugs, of course, they mean the old sort, the old practice now fast becoming obsolete; and by the knife they mean the new method, the practice of submitting everything to operation. Against this practice a reaction is nearly due, similar to that which prompted Thomson's rebellion against the abuse of mercury and the depletant system in general. Nobody has any prejudice against drugs that "make good." It is the useless and injurious medication to which people object. The best way for the medical profession to head off this straying away to false and foolish gods and goddesses is to devote more time to the study of therapeutic means and methods which mean something practical.

INFLUENCE OF NARCOTICS ON PHAGOCYTOSIS

In *The Lancet* for February 26, Reynolds contributes an interesting paper upon the influence of narcotics on phagocytosis. He quotes the experiments of Cantacuzene,

who found that when guinea-pigs had been immunized against cholera, and opium was given, followed by a sublethal dose of cholera vibrios introduced into the peritoneum, in spite of vascular dilation diapedesis did not take place. The vibrios retained their form and motility and multiplied rapidly. As the effect of the opium passed off diapedesis began and in a short time large numbers of leukocytes appeared on the scene, which rapidly enveloped the vibrios.

The animal invariably died, in spite of the fact that no free vibrios were present in the exudate. On examining this it was found that some leukocytes, showing marked signs of degeneration, were literally stuffed with vibrios. These, although capable of enveloping the vibrios, were killed by the latter's toxins, and then served as a suitable medium in which the vibrios multiplied. This never took place unless the animal was under the influence of opium.

Reynolds' experiments showed that morphine not only checked diapedesis but diminished phagocytosis in a marked degree. The growth of bacteria was not appreciably affected by the morphine. He makes the following deductions:

"It is probable in most surgical operations a certain number of pathogenic organisms gain entrance to the wound, however carefully asepsis may be observed. The further history of the case turns on this point: Will the phagocytes be able to destroy these bacteria before the latter have multiplied sufficiently to gain the upper hand? If morphine temporarily paralyzes the activity of the phagocytes, if this drug be given, time is lost during which the bacteria multiply. When the narcosis passes off the phagocytes may be unable to destroy the bacteria on account of their number and the paralyzing effect of the toxins produced by them; in fact, by giving it, the chances of sepsis have been increased.

"Again, consider an acute infection such as pneumonia. From the onset we know that a certain number of pathogenic bacteria are present at the site of inflammation, and the progress of the disease will depend largely on their multiplication. At first,

when there is little secretion in the tubes and the cough is dry, it is common to give morphine. Here the phagocytes are placed *hors de combat* at a time when they should be particularly active. The bacteria steal a march when the phagocytes are asleep, they multiply, and the phagocytes recover from their lethargy to find their task infinitely greater than before.

"Lastly, take an early appendicitis with obscure symptoms, when palliative treatment is adopted. Textbooks recommend morphine to check peristalsis and quiet the patient, but not much, since it tends to mask the symptoms. It not only does this but it muzzles the phagocytes. When the latter recover their vitality, even though they be able to overcome the bacteria, the reaction is much greater than it would have been had the phagocytes been free to act from the first. More fluid is poured into the tissues of the inflamed appendix and the danger of strangulation and subsequent sloughing is so much the greater."

Instead, then, of administering morphine at the beginning of infectious maladies, thereby impairing the natural defensive forces of the organism, it would be wiser to seek to intensify these forces through increasing phagocytosis; and how better can this be done than by charging the patient's blood with a nuclein solution.

"Whatever the weather may be," says he,
 "Whatever the weather may be,
 It's the songs ye sing an' the smile ye wear,
 That's a makin' the sun shine everywhere."
 —James Whitcomb Riley.

THE CRUELTY OF CHRISTIAN SCIENCE

Unthinking people readily take up any proposition that has to them the virtue of novelty, and without much consideration adopt the tenets of the latest cult, and sedulously apply themselves to its propaganda.

Novelty! It is older than Christianity. It was hoary but not venerable when the lame slave indited those Fables the deathless wisdom of which has not been dimmed by thousands of years, and which are still

transmitted from generation to generation as crystallized gems of truth. When men prayed to Jupiter and piously looked to the gods of Olympus the story was told, with an accompaniment of common sense that seems curiously modern. What more perfect illustration could be given of the present-day craze than the story of the man who, having fallen into a pit, lay there calling on Hercules to help him out, until the god curtly told him to help himself?

No wonder the women take it up. There is an essentially feminine, and that means maternal, principle underlying the conception. To woman the cosmos is completed when her child lies in her arms, helpless, dependent on her for life, looking to her for the fulfilment of every want, she to divine these by maternal instinct and satisfy them before the infant is really conscious of their existence. The child finds in her the most devoted of slaves, and to many a child and many a mother this fundamental conception of their relation never ends. The child painfully learns to dissociate himself from this dependence, the mother still more painfully and most unwillingly. To her, therefore, the idea of lying down and letting the Deity do the worrying is harmonious with her deepest, holiest instincts.

Surely it is not a cult for Men!

Since the gospel of love has been made the pretext for the most horrible cruelties inflicted by man upon man, we need not wonder that this phase of maternalism has been so perverted as to render it, instead of the beneficent protection of the budding being, the means of withdrawing all the safeguards that modern knowledge and skill, the accumulated experiences of the race, have made available for the prolongation of these little lives. In irrational devotion to a cult whose priesthood rivals that of Moloch, the cries of anguish pass unheeded; the prayers of the child for relief fall on deaf ears, the maternal solicitude is submerged by a callous indifference for which history offers no example since its misty dawn. Dominated by the religious principle, the mother cast her firstborn into the flames, but she did not sit idly by while it choked

to death with croup; and when nature gave up the fight and the little limbs stiffened in death, coolly blame the death she might have prevented on the innocent's unbelief.

Paget sent letters to many physicians, asking for reports of cases in which harm had been done by the false trust in Christian science. He says:

"I got back a long list of killed and wounded; I wish it could be nailed to the doors of all our churches. I could only publish it, saying: 'To see the full iniquity of these cases the reader should be a doctor, or should go over them with a doctor. But everybody, doctor or not, can feel the cruelty, born of the fear of pain, in some of these scientists; the downright madness threatening not a few of them, and the appalling self-will.'

"They bully dying women and let babies die in pain; let cases of paralysis tumble about and hurt themselves; let appendicitis go on to septic peritonitis, gastric ulcer to perforation of the stomach, nephritis to uremic convulsions, and strangulated hernia to the *miserere me* of gangrene; watch, day after day, while a man or a woman slowly bleeds to death; compel them, who should be kept still, to take exercise; and withhold from all cases of cancer all hope of cure. To these works of the devil they bring their own deaf, wilful and complete ignorance; and their "nursing" would be a farce if it were not a tragedy. Such is the way of Christian science, face to face, as she loves to be, with bad cases of organic disease."

"I wrote that paragraph carefully, from notes of actual cases; I stick to every word of it; and I hope that all who know of similar cases will communicate with me, so that I may add them to my list.

"Seeing the gross and shameful mal-practices of Christian science, the long trail of pain and of death that she leaves behind her, her impudent concealment of all her failures and worse than failures, her notion that all diseases alike are mental and none of them in reality there; her mad resolve never to examine a case, or read a medical book, or look at a specimen, or take a tem-

perature, or auscultate a chest, or use a microscope, or acknowledge any difference between ordinary backache and spinal caries, between functional paralysis and organic paralysis, between indigestion and carcinoma of the stomach, between pain in the breast and cancer of the breast; her frequent cruelty, especially to small children; and her brutal way of saying that her patients die for want of understanding what she tells them—seeing all these abominations, we ought to prevent even the faintest shadow of them from falling across our church."

Ideals are like stars; you will not succeed in touching them with your hands, but like the sea-faring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

THE ROLE OF THE PHYSICIAN

Most arduous and difficult is the task of the physician at the bedside of the patient. What is the doctor's true object? Evidently, to discover the cause of the patient's illness. But how?

To establish the pathogeny the doctor has recourse to physical examination and to the study of symptoms. The diagnosis is an essential, yet difficult to establish; nevertheless every means must be taken to arrive at it, or a doubtful judgment may result in a false treatment. Certainty must rest on a study of the symptoms; these nearly always declare themselves during the primary days of the malady, but during these the disease may make great progress and commit irreparable ravages. Hence, contrary to the principles of the expectant school, arises the necessity of energetically attacking the morbid principle at the start, as represented by the fever. For when we have succeeded in quelling the fever, we have secured the mastery over the malady.

The expectant one, called to an acute case, examines the patient, recognizes—or

usually doesn't, since as a rule he waits—a febrile temperature, dry skin, etc. He prescribes placebos, crosses his arms and—waits! If he has found the patient in an alarming condition he invokes the saints, covers the sufferer with revulsives, and administers impossible mixtures that fatigue instead of solacing him. Meanwhile the disease runs its course and augments the anxiety and the torments of the patient, even if it does not imperil his life. Yet how easy it is, instead of contemplating the unhappy patient with folded arms, to exert oneself energetically and combat the morbid processes before they have grown into unremediable conditions.

The expectant prescriber, besides his ignorance of the effects of the medicaments he prescribes in antique formulas, is ever pursued by remorse for not having known how to act in time.

The active-principle user, on the other hand, also observes the patient, follows step by step the phases of the malady, and immediately combats the initial symptom of fever, then the secondary symptoms as they declare themselves. Hence come immense advantages to the patient and that sense of satisfaction to the physician for having done his duty and proved himself useful to his kind.

Well may Burggraeve predict that posterity will find it astonishing that things so simple should take so long a time to win acceptance.

Cure! CURE! Messrs. Doctors, if you would merit this honorable title. To what good are all your fine theories on fevers and pneumonias if with a few granules of quinine hydroferrocyanide, strychnine, aconitine, veratrine, digitalin, and phosphoric acid one can anticipate or cure these maladies?

"Skepticism should not serve as a cloak for ignorance, nor as an excuse for inattention and neglect." (Tabourin.)





A Talk With the Young Graduate

Cheerful Advice for the Embryo Doctor

By **GEORGE F. BUTLER, A. M., M. D., Chicago, Illinois**

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I AM glad that I am a doctor, and glad that I have this opportunity of addressing, through the columns of THE AMERICAN JOURNAL OF CLINICAL MEDICINE, medical students about to go out into the world as practising physicians.

Medical men are to be envied; if they cure, their patients are loud in their praise, but if they do not, they preserve a dead silence—which reminds me of what my preceptor told me when I first entered a medical college:

"I have always remembered my first patient," he said to me.

"I trust he remembered you," said I, thinking of the large income I would soon have.

"He would have done so, no doubt," said the doctor, "but he hadn't time to make a will."

The large income I expected didn't materialize as rapidly as I anticipated, after beginning practice, and I prayed many times that my father-in-law, who was backing me, would have *remittent* fever.

In all seriousness I wish to congratulate you upon the life-work you have undertaken. As members of the medical profession you will by no means be the poor relation of any professional family.

The public cannot be expected to estimate us by any other measure than that of

our usefulness. It is all very well for a patient to feel that his medical man is carefully trained in physical examination, and capable of constructing a skilful diagnosis; but the essential thing after all is confidence in his power to aid him when stricken and prostrated by disease or accident. The latter is our actual business and occupation in life; and it is here that success is most to be desired.

In our efforts, however, to cure disease, we must not overdo it. We must not drug our patients to death. On the other hand, don't be so scientific that all your patients will die "cured." I once had an ultra-scientific accomplice, otherwise a consultant, in a case, and I differed with him regarding the diagnosis; with a great show of confidence in himself he said: "I disagree with you, Doctor, and the autopsy will show that I am right."

It did, and ever since that I have allowed no patient to die on my hands, for when I find a man is going to die, I call in a specialist.

Speaking of specialists, reminds me to caution you against the idea of being a specialist as soon as you enter practice. Do not seek the specialty, let the specialty seek you. There should be no specialists in medicine save in departments requiring such marked dexterity as can be acquired and

retained by extensive and constant practice. If after years of study and reflection your inclination, your peculiar fitness for the task, or your wide experience in some chosen field of investigation warrant the attempt, then and not till then can you properly limit your studies to those of the specialist.

Be a Good General Practician

Let your ambition be to be a good general practician. He is usually the most broad-minded. It belongs to the office of the family physician to know fully the medical history of the family; to keep himself constantly informed as to the physical condition of each member; to advise as to the education, choice of occupation, residence, and whatever else may have an influence, present or prospective, upon the conditions of health. The family physician is the one who can take in the whole picture of the case, and is not so apt to be prejudiced and narrow, and he usually possesses more tact. He cannot fail to become every year more useful and more honored, until he shall stand first among the secular influences which promote the welfare of the race. The man who enters a specialty immediately after he is graduated may resemble a locomotive, grand and powerful when following the narrow railway—his specialty—but off the track a helpless, inert mass of iron.

A man who stuttered went to a throat specialist about his affliction. The specialist asked, "Do you stutter all the time?" "N-n-n-no," replied the sufferer; "I s-s-s-stut-t-t-ter only when I t-t-t-talk."

I know of a case where a heart specialist was called to see a guest in a prominent hotel in this city. The patient had a pulse of twenty-five, and the doctor got rattled and said the man would die before morning.

A good old general practician was called in consultation, strange to say. He looked over the man carefully, and then inquired, "Where do you live?"

"Philadelphia," slowly gasped the patient.

"Oh, that clears up the case wonderfully," said the old doctor, "you remain in

Chicago a week and your heart'll beat fast enough."

This sort of common sense is well illustrated by the case of Colonel Blood of Kentucky, who was very ill. The old doctor called one morning and inquired, "How did your husband pass the night, Mrs. Blood?"

"He seemed quite comfortable, sir, and asked for water several times."

"Whereupon the doctor looked grave and remarked, "H'm—still flighty."

Serve Humanity—Also Yourself

You go from your college, equipped to do service to humanity, and indirectly to yourselves. Let it never be said of you that your highest ambition implies the reverse of this statement, or that you suffer the shadows of your own personality to obscure the clearer light of professional duty and the nobler impulses which should actuate those who aspire to treat the sick. Some of you, doubtless, will attain success and fortune; a few will become preeminent; a large number must contemplate bravely the level to which members of all professions are eventually assigned—a dull, sometimes chilling struggle, to be met with calmness, courage, and untiring industry. Be not dismayed by the vicissitudes and disappointments of your high calling; remember "King Henry IV."

"Yield not thy neck
To fortune's yoke, but let thy dauntless mind
Still ride in triumph over all mischance."

Every young man, beginning life in earnest, naturally feels discouraged at times; but, if he is made of the right kind of stuff, he will fight off the feeling and work and wait.

No one is ever beaten unless he is discouraged. The man who can be easily discouraged, or turned aside from his purpose, the man who has no iron in his blood, will never win.

You will have to make your own path in the practice of medicine. You must play the game alone.

No man ever sailed over exactly the same route that another sailed over before him; every man who starts on the ocean of life arches his sails to an untried breeze. Like

Coleridge's mariner, "he is the first that ever burst into that lonely sea."

Don't Worry Because You Are Not a Genius in Medicine

We can not all be equally talented, but we can fill the place God intended us to fill. The crow is not the eagle, and no amount of sun-staring will make it one. It is no man's business whether he has genius or not; work he must, whatever he is, but quietly and steadily, and the natural and unforced results of such work will be always the things that God meant him to do, and will be his best. No agonies nor heart-rendings will enable him to do any better! If he be a great man, they will be great things; if he is a small man, small things; but always, if thus peacefully done, good and right; always, if restlessly and ambitiously done, false, hollow and despicable. The real work that is of substantial and lasting benefit to the community at large has to be done on a mediocre level. It is just as much to be a common soldier in the ranks as to be a general that leads. We cannot all be generals.

We may "hitch our wagon to a star", but every star is not a shooting one. A good ordinary road horse would answer the purpose better.

The demands of what may be considered a general talent are very great, and the majority of struggles, by force of circumstances, must necessarily be content to add to the common stock. If we gain nothing more than experience, it is generally paid-up stock for an emergency. All opportunity is the reward of watchfulness. Experience, no matter of what kind, if it is only weighty enough, is always good ballast in a storm. If it can take a bite on the wave, the rudder has a good purchase.

If you have great talents, industry will improve them, if you have but moderate abilities, industry will make them better. What men need is, not talent so much, but purpose; in other words, not the power to achieve, but the will to labor.

"It is not enough to know, we must apply; it is not enough to will, we must also

do", says Goethe; and Carlyle, in his cynical and vehement way, took it up and made it ring into the ears of his own generation with a passion of eloquence that reverberates yet.

"Produce! produce!" he cries, in "Sartor Resartus." "Were it but the pitifullest infinitesimal fraction of a product, produce it in God's name! 'Tis the utmost thou hast in thee: out with it then. Up, up! Whatsoever thy hand findeth to do, do it with thy whole might. Work while it is called Today, for the Night cometh wherein no man can work."

Don't hesitate! Pitch in!

Indecision becomes a disease, and procrastination is its forerunner. Those who chase that phantom deceiver, Tomorrow, never arrive anywhere, never come to anything but failure.

Unless you determine to achieve those things which are absolutely indispensable to success, and sacrifice all the little trifles which are nibbling away at your precious moments, you will accomplish nothing worthy of a great life.

Work, play, study—whatever it is, take hold at once, and finish it squarely; then to the next thing, without letting any moments drop between.

Tomorrow men never do anything. It is the today-men, the now-men, who accomplish the great things in the world.

Be Optimistic; Be Cheerful

Ordinary people think merely how they shall spend their time; a man of intellect tries to *use* it. To be a thoroughly successful doctor you must be optimistic. Educate the will-power so that it will focus the thoughts upon the bright side of things and upon objects which elevate the soul, and thus form a habit of happiness and goodness which will make you rich.

A doctor should be cheerful and possessed of humor. Humor is one of the most human of qualities, linking itself so closely with sympathy and pathos that you seldom find them separated. The fountains of laughter and tears lie very close together.

The person who carries a smiling countenance, keeping his troubles to himself, ever

finds a welcome. He makes a host of friends, and impresses others with the belief that he must be successful in order to be so cheerful. This fact inspires confidence, and he consequently makes his way in the world where another, with more brains but less buoyancy, fails.

The Smile's Worth While

Laughter is contagious; often the presence of one jovial spirit will affect a whole company. Invalids are always helped by a call from a smiling, hopeful doctor. Dr. Oliver Wendell Holmes said: "A smile may be worth five thousand dollars a year to a man." It is often worth that much to a doctor, and is of incalculable value often to a despondent patient.

Cheerfulness is a never-failing source of influence. It is a nerve tonic and stimulant. It cheers the timorous, encourages the despondent, and comforts the despairing.

The hopefulness and optimism of the physician do far more than cure feeble minds and faltering wills. They assist the cure of every disease he encounters. His very cock-sureness—to use a favorite expression of a well-known specialist, "I am not only sure, but I am cock-sure"—and especially his cheerfulness, hopefulness and optimism, produce a confidence and belief in his powers that cure quite as much as any means that he may use.

Alteratives for the mind are generally more important and efficacious than alteratives for the body.

Coleridge considered him the best physician who inspired most hope. The patient should receive the full benefit of hope. If he be a man cast in common mold as regards love of life and dread of death, expression must never be given to our fears in any form. The bare suggestion of death to such a man may turn the scale against recovery. Fear being recognized as a powerful cause of disease and a direct and great obstacle to recovery, a wise physician will exert himself to prevent or antidote its influence. To eradicate fear and stimulate hope is to avert disease, to shorten its duration, diminish its virulence and promote

recovery. There is a mental and moral sanitation ahead of us which is perhaps as valuable and desirable as all our quarantines, inventions, experimentations and all microscopic search for physical causes.

Three Vital Ideas

You should make a point of so disciplining and training yourself as to infuse at least three ideas into your patient's mind at every visit.

1. That the case has your whole and undivided attention.
2. That you thoroughly understand it; and
3. That you believe you can cure it, or at any rate, take a hopeful view of it.

You must remember that with each sufferer who may come before you there is an individual history, as interesting as, perhaps more so than, your own.

Let me caution you against the narrow jealousies, the envious moods and petty rivalries which not infrequently mar the practice of your exalted profession, and are a reproach to its heart and intelligence. They not only impair the physician's dignity and his usefulness to society, but, being readily perceived by an observant laity, prove detrimental to the general prestige of the medical fraternity. "There is glory enough for all," as Admiral Schley magnanimously signalled, and the encouragement and maintenance of a generous *esprit du corps* should be your constant price.

A yet more potent factor than professional rivalry in molding this personal zeal is the omnipresent craze for financial gain; a desire to get rich as speedily as possible regardless of methods.

In all ages men have loved wealth. A love of money for the accomplishment of honest purposes is perfectly legitimate, indeed commendable. Yet no careful observer, I think, can fail to perceive that within a few generations there has crept over the American people a strangely inordinate lust for lucre, an all-devouring passion for material prosperity, degrading in its motive and deplorable in its moral influence. The craze has unfortunately been

rendered the more acute because of the numerous brilliant examples of success in speculative and professional life, and the mysterious process by which comparatively impecunious individuals throughout the land suddenly acquire more than a competency.

Where the logic of these triumphs is not clear to the public mind there arises a natural distrust, together with an ill-defined and not overscrupulous tendency to emulate the achievement.

The possession of wealth cannot compare with having the mentality stirred by a passion for expansion, being dragged out of the narrow rut of ignorance to come into close communion with the great and the grand of all ages, being brought into contact with nature, feeling the divine touch of science, and forming intimate relations with the entire universe.

The men who enrich the world with real wealth are not, as a rule, those who have the most money.

Nothing is more pitiable than for a person to have more property than he has manhood.

What the World Needs

What the world wants is young men who will amass golden thoughts, golden wisdom, golden deeds, not mere golden dollars; young men who prefer to have thought-capital, character-capital rather than cash-capital.

Your chief motive for entering the medical profession should be for the love of the work, not for money alone.

The idea of working for the love of the thing was exemplified in John Hunter, the founder of the Royal College of Surgeons. He had not a large income and was compelled to work steadily at his practice.

When absorbed in his grand investigations and being interrupted by a patient he would testily exclaim: "There is that confounded guinea to be earned!"

He simply proved what many others have also done—that medicine is a grand profession, but a very poor trade.

Pecuniary success, in a comparative business sense, is certainly not one of the con-

spicuous rewards for the doctor. Success in life is to be regarded as a means, and not as an end; and that therefore there is such a thing possible as unsuccessful success—such a thing as gaining every end, while the whole life has been a failure.

Popularity is not the test of success. As Cowley says: "Every mountebank has more than the best doctor, and the hangman more than the lord chief justice of a city."

Success is the accomplishment of the laudable life—purpose of a man of natural or cultivated parts who has found an object in life worth living for and has worked honestly and perseveringly to attain it.

The man who does the very best he can under all circumstances, who makes the most of his ability and opportunities, who helps his fellow men whenever it is in his power to do so, who gives the best of himself to every occasion, who is loyal and true in his friendships, kindly, charitable and magnanimous toward all, is a successful man. The greatest thing a man can do is to make the most possible out of the stuff that has been given to him. Make every occasion a great occasion, for you cannot tell when Fate will take your measure for a higher place.

The world wants the very best thing. It wants your best. No man fails who does his best. You'll have money enough if you do that, but don't get it into your head that in order to be a very successful man you must be a very rich man.

Money and Real Success

There is really very little connection between the accumulation of money and real success.

And yet I have heard lecturers say that every poor boy could succeed, and citing as examples men who, twenty years ago perhaps, were working for from \$20 to \$50 a month on farms or in shops and who now are presidents of railroads, banks, coal-mines, steel trusts, etc., at from \$50,000 to \$1,000,000 a year, the young men going away believing that financial success is the only success in life. And they have some reason for believing this, for the standard by which

society now measures men is the purse; politics is becoming a high chess play, whose pawns are power and plunder; business is becoming but a gouge game wherein success hallows any means; our social favorites minister in the temple of Mammon; our god is the golden calf.

Cincinnatus no longer waits for the office to seek the man; he sells some watered stock and buys a political boom. The princes of old conquered the earth, but the modern plutocrats put a mortgage on it. Such is the modern standard of success—and it is all wrong. Money is not all of life.

"When a man pursues money only," said David Swing, "his features become narrowed; his eyes shrink and converge; his smile, when he has any, hardens; his language fails of poetry and ornament; his letters to a friend dwindle down to a telegraphic dispatch; he seems to have no time for anything, because his heart has only one thing for which it wishes time."

How different from Louis Agassiz, who, when asked why he did not acquire a handsome competency in view of his rare talents, replied, "Oh, I have not time to make money."

Contrast with this noble attitude the fawning flattery, the self-conceit and arrogance visible everywhere in ultrafashionable society.

Some Successes—and Some Failures

A simple farmer loving his work and contented in his home and doing the best he can for himself and others is as successful as the president of a coal-trust—and more so. Father Damien was the grandest success of the century; Alexander of Macedon the most miserable failure known to human history. Success? A Rockefeller must give up his gold at the grave, the sovereign surrenders his scepter.

Why should men strive for power that passes like the perfume of the dawn and leaves prince and pauper peers in death?

Why should man, made in the mortal image of immortal God, become the subservient slave of Greed and barter all of time for a handful of yellow dross to cast upon the threshold of eternity?

"Poor and content is rich, and rich enough. With a roof to shelter those his heart holds dear, and table furnished forth with frugal fare, with manhood's dauntless courage and woman's deathless love, the peasant in his lowly cot may be richer, far, than the prince in his imperial hall."

Success? I would rather be a farmer on forty acres of land than a miserly millionaire preying upon the misfortunes of his fellows. I would rather be a peddler of hot peanuts than a plotting politician who gives to bond-grabbers and hoodlums privilege to despoil the pantries of the poor. I would rather watch the stars shining down through blue immensity and the cool mists creeping round the purple hills than purchase with ill-gotten gains all the tawdry treasures of Ophir and of Ind. I would rather be a doctor in a lumber camp on \$500 a year, and see the love-light blaze in truthful eyes and watch my children grow in grace and the truth of God, and minister patiently and cheerfully to the sick and suffering in the community like Dr. MacClure in the Bonnie Briar Bush than to build of widows' sighs and orphans' tears a flimsy bubble of fame to be blown adown the narrow beach of time into Eternity's shoreless sea.

What we need to teach our boys is to aspire to be men, not plutocrats; to do whatever their hands find to do, and to do it honestly and well.

Help to Improve the Condition of Society

As a member of a noble profession, you should add your leaven toward improving the conditions of society. I assert that what the community today most lacks is the individual instance of virtue, so that all the world may say with Shakespeare, "This was man"—a noble, virile type, the living exemplar of that high conscience, that stainless sense of honor and incorruptible love of truth which alone proclaim the Creator's image. Where in the range of the educated professions, in politics, in art, in science, in literature or in the worlds of trade and the artisan shall we find our Sidney, or Bayard?

No one could wield a stronger influence in the community than the doctor, if he

would but exercise it, and it is our duty to stand for personal and public honor and honesty and for the enforcement of law and good government.

We need more men of backbone in this country and fewer whiffling, greedy, politicians and grafting millionaires. Descartes has said: "If it be possible to perfect the human race it is in medicine that we must seek the means."

It's up to you! It is the duty of the medical profession also to disseminate knowledge among the laity regarding social and sexual hygiene, and the prevention of disease.

It is time to do away with prudery and false modesty, in the interest of public health and better morals.

As physicians, members of a noble profession, you should emerge from the seclusion of the study and remember that you are not to be relegated to the eighth estate to which the grawsome undertaker and parish sexton are consigned, but should stand as a living power in the community, pulsating with its emotions, bound to it by indissoluble ties of sympathetic interest, and, through force of character, supplying the deficiencies of others.

State Board Examinations

Hints to Those who Must Pass Them

By R. G. SCHROTH, M. D., Chicago, Illinois

EDITORIAL NOTE.—*There is probably no man in the country who has had so much experience in preparing physicians to pass medical examinations as Dr. Schroth. And his students pass! The secret of his success is the carefulness with which they are trained to systematize their knowledge, to "put two and two together." In this article the doctor takes us behind the screen and shows us how he trains men to study.*

YOU will find this article worth reading and considering. File this journal away cautiously in a convenient place, so that you may frequently refer to it, or else give it to some other worthy individual.

If through these few lines you can obtain the great secret, How to Prepare Yourself for a State-Board Examination, you will not only pass the examination, but you will have acquired a complete equipment for your life's journey in the medical profession. There is no examination which requires more forethought, reflection, learning and mind capacity, than does the state medical examination, for it requires positiveness, sincerity and enthusiasm, not only with oneself, but also with the surrounding conditions.

Lay a Firm Foundation for Your Studies

You should remember that you have chosen the medical profession as your life's

work, of your own free will and accord, after due consideration and without misinformation, and you must know that the profits derived therefrom are gauged according to the faithful fulfilment of the obligation you took to yourself when you first said, "I am going to study medicine." And therefore you should consider the fact that there is only one person in this world that could be a drawback to your success in completing your course by preparing yourself for a board examination, and that person is yourself; also, that there is only one person for whom there is no help in self-preparatory work, and that person is the one who will not help himself.

You can, by your will and the power incorporated within yourself, bring art out of the realms of supposed medical mysteries, and obtain the best for yourself, without experiment, in a short time, if you will have a watchful eye, listening ears, a thinking mind and a positive will. You must try

to solve the disheartening blunders and overcome the disastrous guesswork and wasted opportunities of the past.

You must awaken the spirit within yourself, and reach out quickly with both hands and mind for everything good that leads to your success, otherwise you are not worthy the honorable title of a physician. Do not try to get a "passing-mark" of only 75; try for a hundred. Be positive and sure within yourself that you can accomplish all things and can do what others can not do. Do not try to be ultrascientific; your system should be to *think*, to *know*, to *do* and to *accomplish* all things by the five physical senses in a practical and simple way.

Action—Not Weak Wishing

Decision—then activity. This must necessarily follow. It is not enough to "wish." Wishing never accomplished anything. You must say, "I will." What you will to do, you can do; and what is worth doing is worth beginning—*now—today*. Indecision and hesitancy, when reason tells you to act, are fatal. It is not time to wonder whether you can do it. "*Do the thing and you shall have the power.*" This is the law. It is folly to wait for better conditions. The thing to do is to prepare yourself now. Preparation always preceded positiveness; and positiveness precedes promotion; and promotion precedes success every time. Prepare yourself, and when the opportunity comes you will be ready.

Advancement is for you, but you must make an effort to meet your opportunity at least half way.

It has been ascertained that the most successful method of learning is something after the following way: Make every day a new day. When you go to bed, and also when you get up in the morning and your mind is clear and in a receptive state, ask yourself, as if in prayer: "What can I remember of yesterday's work? What have I accomplished? How much am I going to accomplish today?"

When you wish to study, arrange to do so fifteen minutes before each meal, before going to bed, when getting up, and a half

hour or an hour each morning, afternoon and evening, as though you were administering medicine to a patient. Do this conscientiously and systematically, and let no person or no thing break into these solemn silent moments. This is the way to study without becoming tired. If you can increase the time without becoming tired, do so.

From the very beginning of your new quiz work endeavor to master and make your own medical terms and phraseology, like all other influential professional men; in short, live in the atmosphere of a physician. Classify and simplify your own knowledge, study one subject at a time, carefully, regularly and systematically.

How to Study to Best Advantage

First read the questions on one subject through, as you would an English classic. Then go over it again, making a critical study of the questions; close your eyes and think, and have the pictures of the question photographed upon your mind. Now begin all over, dissect each question, and mark and emphasize such questions as may impress you as being important. Then go over the entire list and answer to yourself the questions you think you can answer without looking at the printed answer. Now turn back to the guide questions, and compare your answer with the ones in the book, to see whether or not you have selected the vital parts of your answer; if not, repeat again, closing your eyes. If possible, do this in a quiet room, so as to shut off all outside influences; think over the work, and see if the same answer will not apply to other questions or groups of questions. Do not try to learn by heart groups of useless words.

The questions you study should be used only as a guide. Read the question, then try to formulate your own answer before you read the answer. Criticise yourself severely for not knowing. Make up your mind to remember what you fell down on and how you reprimanded yourself. Recall the time, the location where and how you sat, whether or not you were feeling well that

day. This will aid you in strengthening your mind, and later on all things will come more easily, for you are learning how to concentrate your mind. Study with a pencil in your hand, picture, dictionary and paper before you; better still, call on your faculty of imagination, and draw a picture in your own mind, and then explain your mental picture.

If you find your mind is not clear on the subject, go over it again and again. This may seem tedious, but remember you are "monarch of all you survey" and your rights none can dispute, and that no one can make you master of your memory and will except yourself.

If your mind begins to feel tired, as sometimes will happen, treat it as you would your wife, your mother, or child—take a vacation or change subjects, or let your mind have rest and recreation, for when mentally tired, you can accomplish nothing. How long should you rest? That depends upon the amount of depression, and the best guide is, until you feel like working again, even though it be an hour or two. Forgetting things which you previously knew is no crime, it happens to everyone. You should remember that we only learn by persistent reflection, comparison, association, and forethought.

How Memorizing Is Simplified

Many questions take the same answer, or at least have a varied degree of similarity, and therefore a distinct connection of thought can be made between them, or they may be figured out.

Follow me for a moment:

1. What muscles are attached to the posterior part of the inferior surface of the tuberosity of the ischium? Biceps, semimembranosus, semitendinosus.

2. What muscles flex the leg and draw the thigh back in running? Biceps, semimembranosus, semitendinosus.

3. What muscles form the posterior region of the thigh? Biceps, semimembranosus, semitendinosus.

4. What muscles form the hamstring? Biceps, semimembranosus, semitendinosus.

5. What muscles form the external hamstring? Biceps.

6. What muscles form the internal hamstring? Semimembranosus, semitendinosus. Some authors include sartorius and gracilis.

7. What muscles are supplied by the great sciatic nerve? Biceps, semimembranosus, semitendinosus, and a branch to adductor magnus.

From the above you will observe that beside the individual questions you have the action, nerve supply and origin of the biceps, semimembranosus and semitendinosus. All that is necessary is the insertion to get the complete description. Of course it will then be easy to get the rest of the technic.

8. Describe the biceps.

The biceps arises from the posterior part of the inferior surface of the tuberosity of the ischium, and by its short head from the linea aspera of the femur just below its middle, inserted into the head of the fibula externally: action. Flex the leg on the thigh and draw the thigh back in running. Nerve: great sciatic.

9. Describe the semitendinosus.

It arises from the posterior part of the inferior surface of the tuberosity of the ischium, with the biceps inserted into the upper fourth of the internal surface of the tibia. Action and nerve: same as for biceps.

10. Describe the semimembranosus.

It arises from the posterior part of the inferior surface of the tuberosity of the ischium, inserted into a transverse groove on the posterior surface of the internal tuberosity of the tibia. Action and nerve: same as for biceps.

After you have mastered this much of the work, looked at the picture in the book and have it photographed upon the mind, then you can read from the textbook and get the minor details, if you want them.

Simple Method for Learning Skeletal Articulations

Here is another simple method of learning articulations.

Name and give the articulations of the bones of the face:

Face—14 Bones

2 Lacrimal, 2 malar, 2 nasal, 2 superior maxillary, 2 palatal, 1 vomer, 2 inferior turbinate, 1 inferior maxillary.

Sup. Max.

L	Lacrimal	1
M	Malar	1
N	Nasal	1
O	Opp. sup. max.	1
P	Palatal	1
F	Frontal	1
I	Inf. turb.	1
V	Vomer	1
E	Ethmoid	1

Palatal

V	Vomer	1
O	Opp. palatal	1
I	Inf. turb.	1
S	Sphenoid	1
E	Ethmoid	1
S	Sup. max.	1

6

9

Lacrimal

F	Frontal	1
I	Inf. turb.	1
E	Ethmoid	1
S	Sup. max.	1

Vomer

P	Palatal	2
E	Ethmoid	1
S	Sup. max.	2
S	Sphenoid	1

6

4

Malar

S	Sphenoid	1
O	Sup. max.	1
F	Frontal	1
T	Temporal	1

Inf. Turb.

S	Sup. max.	1
P	Palatal	1
E	Ethmoid	1
L	Lacrimal	1

4

4

Nasal

F	Frontal	1
O	Opp. nasal	1
E	Ethmoid	1
S	Sup. max.	1

Inf. Max

Temporals	2
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4

4

You can do the same with the arteries and of course so with every branch of medicine and surgery. For example:

What are the branches of the thoracic aorta?

P. Please	P. Pericardiac
B. Bring	B. Bronchial
O. Out	O. Oesophageal
M. My	M. Mediastinal Post
I. Instruments	I. Intercostal Post

You note the first letter in each word corresponds to the first letter in the name of the branch. These illustrations are given only for the purpose of showing how you can learn them by heart. After you have them learned, then it is easy enough for you to take a book or look at a cadaver, and figure them out, and remember them forever. Many have seen these points illustrated on the skeleton and cadaver, but cannot remember them in rotation.

You see, in the foregoing illustrations you take twenty of the most common questions, asked by various state boards. You have simplified, systematized and concentrated them, and you master them—they are yours forever. Your money and your power, and today even your honor, can be taken from you, or your character can be misrepresented by some low-lived creature, but no one can take your knowledge.

In Regard to Books

Use a book that will present everything in proper and natural form; one that may be easily understood; a book that gives new thought and ability; one that expresses original ideas, not one that will refer to textbooks or quote authors, where all may read for themselves, and understand each differently. Book knowledge is good and necessary, but facts which can be figured out and explained with original thought without the books are better, for they enable the physician to stand on solid ground at all times. When studying from a book, scratch out all useless comment, argument, unimportant history or dates, so that you will never commit the sin of wasting time by going over that work again; also mark the work you know with a pencil, so that you will put in all your time on work you are not sure of.

After You Have Your License

After you have passed the state examination, remember the fact that the world makes way for the physician who possesses the knowledge, has the experience, exercises his power, and uses his ability.

In every city, town or village, when a perplexing question arises, the physician who is called for is the one who is up-to-date, and the one whom the public generally recognize and make the authority. It may be worth thousands of dollars for you to be the physician who has these qualifications and be able to converse fluently on all subjects and explain perplexing questions to the patient, or in court, as well as in medical meetings.

Many physicians are criticised for their lack of applicability in explaining conditions, not for their lack of phraseology, but because

of the use of too many beautiful phrases, clauses and superlatives, and the lack of ability to lay the subject under discussion before the public as well as in the profession, in a simple and concise manner, so that, regardless of education, all facts are realized and retained.

For Your Future Welfare and Personal Protection

I would advise you to take an insurance policy to protect yourself against malpractice suits, for each state creates its own laws and gives the health of the community to the medical profession. In compensation of which each state requires what? A certain degree of care, skill and diligence of each member of the profession. For this reason each state requires what? That every physician must be of legal age; he must possess a diploma of a recognized college; he must be of good moral character; he must pass a state examination, receive a license, and have it registered in the county where he locates. (State board question.) What requirements are necessary for a physician in order to practise in this state? Answered above.

After you have all this, then you are dealing with the public. By having a policy of this kind, you may save yourself time, money, and humiliation from blackmailers. By having a policy of this kind, and possessing the knowledge, watching yourself and the mistakes of others, you can stop the smooth oily tongues of socalled friends, and bring it within your own power, and provide for yourself, without cost, the means of making such vigorous attacks or defense against such persons, which may not only enable you to vindicate yourself in your own case but contribute to prevent others from bringing like results. And in order to do this, you must be able to answer any question in due form, authoritatively, positively and correctly, without hesitation—misinformation or hearsay for these statements are dangerous.

In Regard to State Board Courses

No doubt it would be highly advantageous and of inestimable value for you, in con-

nection with a self-review course, to take some special stereopticon or reflectoscopic work under an experienced instructor. Not a professor or lecturer, but a teacher and quizmaster.

If you intend to take a state-board preparatory course, investigate for yourself which is the best for you. Take one not best advertised, or one of reputation, but the one that delivers the goods; the one that teaches according to your fancy; the one that gives the greatest amount of work in the shortest space of time; a course that stands for the latest, the broadest, and the best system of teaching. Do not waste time with a course that is conducted on the university plan, which makes the student dig it out of the text-books for himself, for it is too long-winded and contains too many beautiful words, which obscures the sense of the subject rather than bringing out the absolute facts.

I sincerely hope that the reader of this article will never be so low or unethical or degrade himself to such an extent as to cause a breach in our most-honorable profession by denouncing another member of our profession because he feels himself superior to others in any way, or because he is jealous of the success and advancement of another.

Do not be the man or never assist the man who stands on top and tries to make others believe that he is "The Great I Am," or the one who holds his position because someone has put him there, or because he has used such diabolic political influence to apparently rule, or puts himself on a pedestal for a superior people to worship him as a false god. Be honorable, jovial and a good friend, and a good fellow among your brother physicians.

In closing, I will say that if all I have accomplished by this article is to have only caused you to think, I shall feel that I have done my part toward making you successful, at least to a small extent; and I sincerely hope that whenever others come to you under similar conditions you will do as much for them, provided they are worthy of it.

Openings for Young Physicians in the Army

The Advantages of Army Service and How to Get Into It

By J. R. HARRIS, M. D., Fort George Wright, Washington
Captain, Medical Corps, United States Army.

TO the recent graduate any salaried position seems small. He is confronted by the apparent prosperity of his teachers and feels certain that he will do as well. But will he?

Compensation and Expenses of Army Officers

Service in the army offers, from a financial view-point, a good living from the start; with no initial expense for instruments, books or rent. The salary of two thousand dollars, the pay of a first lieutenant, is increased in three years, with advance to the grade of captain, to two thousand four hundred, and a corresponding increase with each subsequent advance in rank. The three years as a lieutenant are, in a way, a probationary period, and advance from the grade of captain will of course be some years later. Every five years there is an increase of ten percent in the pay for continued length of service. For service outside the limits of the United States there is a further increase of ten percent.

In addition there are free living quarters, with a liberal allowance of light and heat, the privilege of having two horses fed and stabled by the Government, besides an annual payment of one hundred and fifty dollars for one horse, or two hundred for two, made to reimburse the mounted officer for the expenses of care and grooming them and the increased destruction of clothing due to riding—and the allowance seems liberal. Contrary to the usual belief, the officers are not furnished food or clothing, but they may purchase, at wholesale rates, many articles of food and equipment from the supply departments.

During the first year considerable expense ensues from the purchase of uniforms, and so forth, but need not exceed three

hundred dollars. Many of the articles of equipment may, in most cases, be left till later, especially as the usual first station of the new officer is in the Philippine Islands; however, with care, the rest of the necessary outfit could be bought for one hundred and fifty more, and most of the things will last for years.

Professional Opportunities

As a rule, in times of peace, the number of sick a medical officer is called upon to treat is never so great that he cannot give each case full and scientific study, and, as there is no question of limiting his visits for financial reasons, he may see the outcome and watch the case as long as there is any interest in it. In most of his cases, treated, as they are, in the hospital, he may enforce the diet, treatment, etc., and know exactly what the patient is doing, the same as in civil hospitals. The post hospitals usually are well equipped, and the library of standard works is kept up to date by the frequent addition of new books, either upon request or by direction of the Surgeon General. Six or eight medical journals are on file, besides a circulating library of medical and scientific periodicals.

The laboratory is equipped for ordinary study, but it is not difficult to obtain any equipment necessary for research work, provided the worker can show his ability.

Practice is limited, mostly, to acute diseases, as the chronic cases are usually discharged or sent to the general hospitals.

There is just enough in the way of obstetrics, gynecology and pediatrics to keep one familiar with the books and to study on the subjects.

The military work consists of sanitary work and instruction in the posts and camps, and drill and instruction of the hospital

corps, consisting of the nurses and attendants. (There are no female nurses except at the larger general hospitals, as at Washington or San Francisco.) Also one is required to keep himself in good physical condition, and in practice in horsemanship.

The writer has been told that he was no more than a slave in the military service, and this may be so, but certainly he is not such as the very men who made the assertion. The army surgeon, of course, must obey his superiors in their lawful commands.

The medical officer goes to the station to which he is assigned. He is confined to his post for a certain part of the day, and if the only doctor in the garrison, he must so arrange that he may be found readily at any time, or if away from the post, that his sergeant may be available for emergencies—and most of the sergeants are capable of attending emergencies, such as ordinary accidents, colics, and other acute conditions. He has only one month's leave (vacation) a year on full pay. However, when sick and granted a sick-leave, that does not apply on his regular leave.

When he reaches the age of sixty-four, he is sent to his home, retired, on pay equivalent to three-fourths of what he last drew in active service; or he may retire voluntarily after thirty or more years of service. The retired-pay may range from two hundred fifty to three hundred twelve dollars a month, according to the grade held upon retiring.

Compare that with the life of a practitioner in civil life, and it will be seen that in general the advantages are with the military man. More satisfactory conditions of treatment of cases, more leisure, better prospects for old age, being distinct advantages. Moreover, at many stations the doctor, if he so desires, may engage in such civil practice as will not interfere with his military work; and there are stations where the surgeon can earn fully as much additional as his regular pay.

Special Advantages Enjoyed

One gets opportunity to see the world at large besides the whole of our own country. In addition to crossing the continent twice,

the writer, during three years of "foreign" service, two times made a tour around the world; that is from New York to Manila, by way of the Suez Canal, and back by the same route, and from Manila to San Francisco, and return. All these voyages were made on board an army transport, and included stays of an average of two and a half days each at Nagasaki, Guam, Honolulu, Singapore, Colombo, Aden, Port Said, Cairo, Malta and Gibraltar, most of the last series being visited twice. The P. & O. steamers making the tourist trips to these ports lay to only about half a day. The cost of this experience, exclusive of purchases of curios and incidentals, was not over two hundred dollars. Now the writer has been ordered to Alaska, where no doubt he will have a very interesting experience. The foreign service referred to, needless to say, was that in the Philippine Islands.

Socially one meets and is associated with a very fine class of people in the officers of the army and their families, as well as the society of the communities near which one may be stationed. No doubt the fact that one is an army officer establishes his position as a gentleman and opens to him, and his, the best society of any community.

In scientific attainment the medical department of the army stands high. A direct offshoot of the work of medical officers of the early days is the weather bureau, the work of which later (as remembered by many now in the army) was transferred to the Department of Agriculture. The signal corps of the army is the outcome of the efforts of a member of the medical corps to perfect means of finding and succoring the wounded on the battle-field. So also is it needless to remind the reader of the great work of the immortal Reed and his associates; or of Gorgas. Surely, as long as our civilization lasts, the sanitary triumphs of these men will redound to the glory of the medical corps of the army of our country.

The admission to the medical corps is, first, by examination and admission to the medical reserve corps, a branch of the corps, the great object of which is to provide

a reserve of trained men for war service, but many of whose members are, in the present shortage of men, called upon for active service in times of peace. The examinations for the reserve corps commission are given at some post near the residence of the applicant. If accepted, he is ordered to the next session of the army medical school and given a course of instruction in army specialties.

Those who pass the examinations and are graduated from this school are given commissions as medical officers of the army proper. Such as receive this commission are required to promise to stay in the service for five years, unless sooner discharged. However, there is opportunity at the end

of three years to leave the service; indeed, if a man's record, during the three years of probation in the grade of first lieutenant, shows that he is not adapted to the conditions of the service, it is probable that the Government will discharge him at that time with a year's extra pay.

On the whole, the position of medical officer in the army seems to be quite desirable and generally satisfactory. The freedom from monetary cares, in the shape of worry over lack of practice and poor collections, is an offset to any of its disadvantages. Of course it has disadvantages, as there are in any other condition of life, but, as shown above, these are outweighed by corresponding advantages.

The Medical Corps of the United States Navy

The Opportunities it Presents for a Career

EDITORIAL NOTE—The article which follows we owe to the courtesy of Surgeon-General C. F. Stokes, of the United States Navy, by whom it is submitted, in behalf of the Bureau of Medicine and Surgery of the Navy Department, with the hope that it will give data of interest and value to young physicians who are contemplating a career in one of the military arms of our Government Service.

THREE has never been a time since ships were used for fighting purposes that there has not been some provision for the care of the sick and wounded on board them. But the history and development of this medical corps, though of great moment and interest, must be laid to one side, for the young man graduating from a medical school is looking for facts bearing on the immediate present and future, not on the past. These may be presented under the following headings:

1. Method of entrance into the Medical Corps of the Navy.
2. Pecuniary returns from such service and opportunities for advancement.
3. Extent and opportunities for professional work.

1. Method of Entrance Into the Medical Corps and Navy

A candidate, to enter the corps, is required to file a request with the Secretary

of the Navy stating his age, citizenship and residence, which is to be accompanied by two certificates as to his moral character, habits and citizenship. When the permit is granted, he communicates with the president of the examining board, who fixes a date for his appearance. In order to be prepared for this examination the candidate for acting assistant surgeon must be between the ages of 21 and 28, or of such age as will permit of his graduation from the Naval Medical School before he reaches his thirtieth birthday. He must also be physically sound and well prepared professionally, as the test is a broad one, coming under three heads: (1) physical; (2) professional; (3) collateral.

The *physical* is far more thorough than an examination for life insurance, for the defects that are looked for are not only those that may endanger the life of the individual but cover, also, those which may in any way incapacitate him for the per-

formance of his duties, i. e., vision, color-perception, weight and height, deformities, and so on.

If disqualified physically, the examination is concluded at once, but if the young physician is found to be sound, his *professional* examination begins. This covers every subject that is taught in the recognized medical schools of the world and is a thorough oral, written and practical test, with the sole aim of finding out minutely the extent of the candidate's knowledge.

The *collateral* examination has been going on during the professional examination, for this embraces spelling, writing, grammar and knowledge of the English language. The special collateral subjects such as history, geology, botany, zoology, languages, etc., may be omitted provided an applicant has graduated from a reputable literary or scientific college, normal or high school, or from a medical school requiring entrance examinations satisfactory to the Naval Medical Examining Board.

Having been successful in the examination, the candidate is appointed to the Medical Corps, by the Secretary of the Navy, as an Acting Assistant Surgeon and assigned usually to a naval hospital for duty. The October following his appointment he is ordered to the Naval Medical School where, for six months, he has a thorough training in his duties as a Medical Officer in the Navy and in professional subjects as developed by the special requirements of a military service. At present he receives, during the period of his appointment as Acting Assistant Surgeon, a yearly pay of \$1,400 while on shore, and \$1,700 if sent to sea.

There is now before Congress a bill to establish a Naval Medical Reserve Corps which will take the place of the acting assistant surgeon's grade and men entering it will be on the same footing, regarding pay and allowances, as assistant surgeons of the regular corps. If this legislation fails to pass, it is considered possible that the grade of acting assistant will be dropped and appointments made directly into the regular Corps, under which circumstance

appointees will receive the pay and allowances, as shown in the accompanying table, for assistant surgeons.

Upon the completion of the course the student officers are again examined, failure meaning a revocation of appointment, success, meaning an appointment as an assistant surgeon in the regular Medical Corps of the Navy (a commissioned officer with the rank of lieutenant, junior grade). From now on there is steady promotion, depending upon examination and seniority, as the tenure of office is for life unless sooner terminated by removal, resignation, disability or casualty.

2. PECUNIARY RETURNS FROM SUCH SERVICE AND OPPORTUNITIES FOR ADVANCEMENT

Upon entering the regular Naval Service, medical officers are credited with five years' service in recognition of the fact that they have been at their own expense in preparing themselves for the Government Service. For each succeeding period of five years the officer receives 10 percent increase upon the pay of the grade he occupies. The accompanying table shows the promotion and pay in the various grades:

There are also certain allowances and emoluments not covered by this table:

1. Liberal allowances for fuel and coal when serving on shore.
2. Eight cents a mile when traveling under orders within the limits of the United States.
3. Actual expenses when traveling outside the limits of the United States, under orders.
4. Retirement on three-fourths' pay (any time during career) on account of disease or injury resulting from causes incident to the service.
5. Retirement (upon application) on three-fourths' pay after thirty years' service.
6. Retirement on three-fourths' pay at the age of sixty-two.
7. In case of death from causes incident to the service, payment of a sum equivalent to six months' pay at the rate received at the time of death, to beneficiary.

Title	Corresponding rank in Navy and Army		Estimated years in each grade	Pay per Annum		Allow- ance for quarters per Year
	On Shore	At Sea		On Shore	At Sea	
Assistant Surgeon	Lieutenant	1st. Lieut.	3 (fixed by law)	\$2200.00	\$2420.00	\$ 432.00
Passed Asst. Surg. (After five years in service)	Lieutenant	Captain	8.....	2640.00	2904.00	576.00
(After ten years in service)				2880.00	3168.00	576.00
Surgeon	Lieut. Com.	Major	8.....	3120.00	3432.00	576.00
(After ten years in service)				3600.00	3960.00	720.00
(After 15 years in service)				3900.00	4290.00	720.00
Med. Inspectors	Commander	Lieut. Col.	8.....	4000.00	4400.00	720.00
(After 15 years in service)				4500.00	4950.00	864.00
Med. Directors	Captain	Colonel	Until age of 62 is reached	5000.00	5500.00	1008.00
(After 15 years in service)				6000.00	6600.00	1152.00
Surgeon General	Rear Admiral	Brigadier Gen- eral	By Presidential appointment for term of four years			

3. Opportunities for Professional Work

This offers a very wide field, both for general practice and for specializing. Besides the fifty or sixty thousand officers and men of the Navy and Marine Corps, the Medical Corps cares for the officers' families, retired officers and their families, and the civilian employees at the big navy yards and stations, not to mention the thousands of natives in our possessions. This work is carried on in field hospitals, dispensaries, sick-bays of ships, hospital ships and hospitals, not only in our own country and possessions but in foreign countries all over the world.

Aside from purely medical and surgical work there are the multitudinous duties resulting from association with a large body of men in a military service. One of the most important of these duties is the safe-

guarding of the high physical standard set for all individuals entering the navy, both officers and men. When it is realized that every one of them is stripped, weighed and measured, examined physically in the most minute detail, land record of all marks and scars taken, to say nothing of the record of finger-prints kept in the case of enlisted men, the immense amount of work involved in this one department will be seen. Add to this duties as sanitary and quarantine officers, instructors of entering medical officers, of hospital corps and enlisted men; also special duties on boards, at national or international congresses and medical societies, and with foreign countries in time of war, famine or devastation, and some small idea of the extent of the ground covered may be obtained.



The Physician's Work in the Indian Service

A Field for the Young Doctor

By FRANK D. PATTERSON, M. D., Schurz, Nevada

HAVING been requested to write an article for the benefit of the recent medical graduates concerning the various phases of medical practice among the Indians, I will in brief give a synopsis concerning this work in the United States Indian Service.

To begin with, the minute details as to how to obtain such a position are given in full in the "Manual of Examinations" issued by the Civil Service Commission. However, a physician capable of passing the average state-board examination will have no difficulty in passing Uncle Sam's quiz, only he will not receive quite so high a mark as he would on a state-board examination, the system of marking Government examination papers being very close.

The professional work varies on different reservations according to the state of civilization of the different tribes. As I have not been in the service quite a year, and that only in a little reservation in western Nevada, where the copper-hued natives are not very much past the scalping period, I shall speak only of what traits of Indian character I have become familiar with in my short experience among the Pah Utes of the Walker River reservation.

The Medicine-Man

These Indians, during the short time in which I have been among them, have to a great extent abandoned their native medicine-men. In some of the older reservations it has been the policy to arrest these pseudo practitioners, but on this reservation moral suasion has been resorted to rather than force. The more intelligent of the Indians, especially those who have been away to a school in which are taught the grades higher than those taught here, have, through education, lost faith in the medicine-men. It may be said here that mental suggestion is the basis of the treatment

resorted to by these native practitioners. The first thing he does is to throw the patient into a hypnotic trance, assuring the friends that he alone can remove the spell, at the same time requiring the payment of a large sum of money before going any further with his treatment. These cunning fellows do not do any credit business and will even extort a poor Indian's last cow.

All-Pervading Prevalence of Tuberculosis

On the Walker River reservation, effective sanitation is much needed. An alarming proportion of these Pah Utes have tuberculosis in some form or other, mostly of the pulmonary type; some have tubercular joints; and there are skin diseases galore, many of which are tubercular. They live in airtight, overheated dwellings, or in wigwams or in tents. Naturally they are decidedly subject to lung troubles of some kind. Going directly from the hot stove out into the open during the winter, and being but thinly clad, as most of these Indians are, is it any wonder, then, that the tubercle bacillus raises havoc with them? Added to this is the fact that all the sputum as well as the evacuations from the bowels are left on the ground to dry. Naturally, the dust arising from the neighborhood of the Indian camping grounds and floating around promiscuously is a serious menace, not only to the Indians but to the white people as well. I have repeatedly, but in vain, appealed to the superintendent for a hospital for the segregation of the tuberculous, and so did my predecessor, but as this would require government funds, no such hospital has as yet been erected here, although some other reservations are thus provided for.

Recently I saw an old squaw whom I knew to be in an advanced state of consumption making baskets for the market. The material was willow twigs which she passed through her mouth and shaped with her

teeth. Such work ought not to be placed on the market without first being thoroughly disinfected. I called the superintendent's attention to this fact, but as that worthy did not fully appreciate the danger of the spread of disease by means of pathogenic organisms that suggestion simply went in at one ear and out at the other.

Aside from tuberculosis, gonorrhea is frightfully prevalent. As Indians can not be made to appreciate the latent tendency of the gonococcus, they cannot be induced to continue treatment for this disease after the urethral discharge ceases. Many if not most of the so-called cases of rheumatism are directly traceable to this disease.

Difficulties of Obstetric Work

For obstetric work among the Pah Utes a doctor is rarely called. The nearest to that kind of work that I have had was a case of retention of membranes and placental debris, and it was not until after considerable urging that I was permitted to use my douche-curet and uterine auger, as Indians naturally shrink from anything flavoring of surgery. Although the woman had a frame hut, she preferred to repair to her wigwam when the labor-pains came on. Of course she was prevailed upon to go to the crude dwelling for this cleaning-out process, even though the aseptic conditions there were far from satisfactory. When in the wigwam, one has to be very careful not to let his clothes ignite from the open fire in the middle of the enclosed space; in fact, not long before a hole had been burned in one of the quilts belonging to the occupants.

With such a constant smoke in their crude dwellings, is it any wonder that there are so many sore-eyed Indians? A case of simple catarrhal conjunctivitis, if neglected, runs into a keratitis, and soon the cornea becomes opaque. Thus, by degrees, many of the Indians become blind even when their affliction cannot be directly traceable to the gonococcus.

Stocking Up With Alkaloidal Granules

I have had a serious difficulty to contend with in not having the modern up-to-date

remedies at my disposal. However, that difficulty will soon be obviated when the drugs which I ordered last fall come in, as among them is a goodly supply of the alkaloidal granules, plenty of adrenalin solution, and enough of glycerin. The physician previously here evidently did not appreciate the value of glycerin as a reliever of all kinds of congestion, or he would not have expected that only four pounds of that valuable remedy would do this reservation a whole year. Instead of antiphlogistine, I have, in cases of pneumonia, repeatedly used glycerin and flour, to the thickness of a paste, as a poultice. Jalap, antipyrin, acetanilid compound, and croton oil could very comfortably have been omitted from the list that had been previously ordered without being missed by a progressive physician. In some cases, where it was a certain thing that the directions would be faithfully followed, and where it was necessary to secure results, I have repeatedly used my own drugs, but it goes without saying that on a small salary one can not to any great extent buy medicine for the Indians.

Every October the agency doctor has to make out an order for medicines, instruments and surgical dressings. In certain cases drugs can be ordered in the open market, but to obtain that authority one must apply to the superintendent, and if this official cannot appreciate the suggestion, nothing can be done, as no other employe on the agency is permitted to correspond directly with the Department of the Interior at Washington.

The Indians Are Stubborn

One serious difficulty in treating them is the fact that so few Indians can tell the time of day, and few indeed there are who have in their possession a watch or a clock. That makes it extremely difficult to treat a serious case where medicine has to be given at frequent intervals.

It will not do to try to force Indians to take any kind of treatment, and at one time I came close to being shot for swabbing out a baby's throat against the will of both the child and the father. An Indian, though

in judgment only an overgrown child, has all the dignity of an individual, and he resents very keenly any interference with his personal liberty. Where moral suasion does not prevail, there is no other thing to be done but to let the Indian patient take the consequences of his neglect of treatment. Thus one sometimes has to see curable patients die. In fact, if there were not a few white people on this reservation on whom satisfactory results of treatment can be made manifest, there would be no inducement for any progressive physician to remain in the Indian service. If a physician is very fond of society, the Indian service is no place for him. Indeed very few do remain in the service more than three or four years, and probably on that account.

The Agency Not Conducive to Self-Advancement

The agency doctor is not, ordinarily, supposed to attend to outside practice, but where he is the only physician in a large territory, he is permitted to attend to such emergencies as arise. If he is inclined to be negligent in keeping up with the times in his profession, no examination, whether state-board or civil-service, will prevent him from becoming a back number; and that tendency to retrograde is greatly augmented when dealing with these crude specimens of humanity who are no intelligent critics of his ability in the Esculapian art. Out in private practice, where there is more intelligent criticism, is also greater incentive to keep up with the times.

It is quite customary for physicians to remain in the Indian service long enough to get a little ahead and go into private practice afterward, as the isolation of an Indian reservation does not have great charms for those more socially inclined. The usual salary paid is seventy-five dollars a month,

besides a few perquisites such as rent, fuel and light, and stationery. The physician may have his Sundays to himself if there is no urgent case on hand. He can also have a month off every year, with pay, if during that time he provides a substitute.

Summary

To sum up the situation as to the relative advantages of a physician's work in the Indian service as compared with that in private practice, the following facts must be taken into consideration:

1. In the Indian service one has an income from the start, while in private practice, especially in a city, it takes time to build up a practice. Many in private practice receive better incomes than in the Indian service, but to start in a city requires more capital than it does in a salaried position.
2. If a physician wants to be in society, the Indian service is no place for the gratification of his social instincts.
3. A physician in the Indian service must be extra well on his guard not to become a back number.
4. Unless the superintendent is a man abreast of the times, a physician's efforts to promote efficient sanitation are of no avail.
5. Last, but not least is the difficulty in having Indians follow the doctor's directions, and sometimes having to see curable patients die for want of following directions. With the proper drugs on hand and the directions carefully followed as good results can be had in the treatment of Indians as in the treatment of white people, allowance being made for various physical defects. It is only a matter of time, however, when education and sanitation among Indians will be universal.



The Equipment of the Young Doctor's Office

By GEORGE H. CANDLER, M. D., Chicago, Illinois

EDITORIAL NOTE.—If the young doctor is determined to make a success in his profession, from the beginning, he should lay his plans to start right, and ponder long over the little things which mean so much. In Dr. Candler's paper he will find a big "bunch" of helpful and practical suggestions, which cannot fail to be of great service to him.

GIVEN the necessary mental equipment—as evidenced by the as yet uncreased "sheepskin" and bran-new state license—a seemingly favorable location and nicely situated office, it yet remains to furnish the latter in a way which will prove satisfactory both to the doctor and his clientele. Even as man is "judged by his apparel," so, to a very great extent, the "new doctor's" ability to do things is sized up by his equipment. The days when a man could start practice with a half dozen well-worn volumes, a surgical case, a pair of obstetrical forceps and well-filled saddlebags are past and the pendulum has swung far over in the direction opposite to simplicity. Too far, perhaps, for in most towns, and the large villages at least, it is the man who makes the greatest display of apparatus and books who wins off-hand the reputation for professional sagacity.

Second-Hand but Awe-Inspiring Wisdom

It is not at all unusual to see an advertisement in the medical journals calling for medical books by standard authors too old to be of real value for reference purposes but well-enough suited to "fill out" the library shelves. The young doctor, quick to recognize the requirements and unable to supply himself with scores of standard works (which he may never take time to read) buys several hundredweight of awe-inspiring tomes, places them behind glass doors where he who enters *must* see, and then tries to live up to the spurious reputation he thereby secures of being a "wonderful scholar."

Unfortunately for the average graduate some men entering practice have abundant means at their disposal and are thus able at the very outset to outfit their offices with

all the paraphernalia offered by the "physicians' supply" houses.

The public has been learning fast of late years, and having read of the wonderful cures secured by the use of hot air, the electric cabinet, violet rays, high-frequency current, vibrator, "ozonator," and "therapeutic lamps," are disposed to rush violently toward the office of that practician who shows the greatest amount of apparatus.

The out-and-out advertising specialist long ago surrounded himself with appliances of every conceivable kind—profiting thereby accordingly—and the most conservative physicians in established practice have found it essential to install at least a good vibrator and either a static machine or a wall-plate. In many instances the huge glass plates never revolve—somehow the doctor "never could get the results" he was lead to expect; the vibrator vibrates with extreme infrequency—yet the apparatus serves a purpose, impressing people with the idea that the doctor *could* use electricity or vibration if their case required it, and they rest content. Of course there are many doctors who really do use their machines and perhaps secure the most brilliant therapeutic results. One practician installs the apparatus in order to *appear* up-to-date but continues to "practice medicine" along the lines traveled by his revered preceptor; the other is *really* a modern therapist and places in his office only such appliances as he purpuses to use intelligently.

From Electricity to Hot Air!

The value of the various modalities—in the treatment of chronic diseases especially—is generally recognized, but too many men imagine they can become electrotherapists by reading the direction-slips which

come with the goods. After a few unpleasant experiences (and the loss, maybe, of a "shocked" patient or two) they acquire a distaste for electricity—and forthwith buy a hot-air machine! Used where indicated and in conjunction with other therapeutic agents, this contrivance may really prove a reputation-builder. But, alas! as a usual thing every patient coming along has to submit to a baking in this new plaything, with the inevitable result that within a month or two another appliance is added to the list of things impressive but not materially useful. It is safe to say that more than a million dollars is tied up today in apparatus standing unused in physicians' offices. And still the sale goes on, for, unfortunately, it is imperatively demanded of the doctor that he be absolutely up-to-the-minute as regards equipment.

Still, a good many thousand practitioners continue to prescribe fluid extracts, tinctures, elixirs, and the like galenicals. It is the writer's privilege to visit the suite occupied by an unusually successful practician who uses *all* the most modern appliances (including an ozonator and minim lamp), and in this man's drug-closet he has observed a collection of fluid extracts, elixirs, and a score or more of well-advertised "ethpharmacals;" but the only alkaloids discoverable were morphine (a goodly supply!) and quinine. This gentleman does not hesitate to state that the claims of the so-called "alkalometrist" are absurd. He himself knows, as he assures his listener, that definite results can not be secured from medicines given internally. In fact, he will tell you (when he grows confidential) that one can do very little to control pathologic processes, the main thing being to impress the patient that you *can* do something you yourself believe to be impossible. Perchance physicians of this type find their strength in the multiplicity of their therapeutic appliances. They certainly do get patients—and very satisfactory fees.

Not All Show

The young doctor, aware of these things and desiring to practise medicine honestly

and to the best advantage, while avoiding the purchase of merely impressive furnishings, needs will have to acquire several things his good old father never would have dreamed of owning. There is a vast difference between being *all* show, and presenting a good appearance; and the education of the people having progressed to a point where much is required, a certain amount of "display" would seem to be essential.

Moreover, it will richly pay the young doctor (especially if he is entering into competition with an "old-time practician") to familiarize himself with the rudiments at least of electro- and mechanotherapy. In nearly every village there is an electric plant; but even where the current is not available the physician can use batteries and run his plate and vibrator satisfactorily. An electrically lighted diagnostic instrument not only impresses the patient but enables the doctor himself to do better work, and in these days the man who is able to diagnose closely and then select the *right* remedy for the pathological conditions present is the man who gets results. In the long run it is the man who gets results who secures the practice. Ergo, the young doctor should, primarily, equip his office to get results. Nevertheless, as stated, it is essential, in order to get patients upon whom to demonstrate one's ability, that a certain amount of "professional apparatus" be well displayed.

Keep the Books Close at Hand

As to books, I am not quite sure that an extensive library is so essential. Such books as the doctor may have should be placed (preferably in sectional book-cases) close to his desk. It is an excellent plan, where the office is not large and the library limited, to make the desk an integral part of the library. Manufacturers list some very attractive and practical combinations of sectional book-cases and desk.

If the doctor has but one room, he should see to it, before moving in, that both walls and ceiling are papered or hard-finished in some light color. The floor should be oiled and polished or covered with linoleum. The room must be well lighted. It is also

desirable to have a closet connected. In cities and the larger towns nearly all the doctors have their office in buildings especially arranged for them, or else have them in their own homes. The country doctor, however (especially the young fellow), has to make shift with what comes to his hand, most commonly one or two ordinary rooms. Under such circumstances, to suggest the need of a toilet-room would be unkind. Still, when there is a closet connected, a commode should be installed, for use in emergencies.

A folding screen is an absolute essential: it can be used by lady patients when preparing for examination; to afford privacy to the occupant of the chair or table, to hide from entering patients soiled dressings or apparatus and similar objectionable things. The screen should be large and made of material which can be washed, imitation leather, such as, e. g., pantasote, being excellent. The white-enamel screens listed by instrument houses are—for this purpose at least—to small.

Shall He Outfit with White Enamel?

It is somewhat of an open question whether the doctor should outfit his office throughout with enameled steel furniture. Where there is a reception room *and* an operating or "work-room," the latter should always be furnished with enameled articles, leaving the reception room (in which would be the doctor's desk and library) as free from the suggestion of "surgery" as possible. Indeed, more depends upon the impression first made upon the average patient than most young men realize. When a sick person visits a specialist or enters a hospital for an operation, his courage has been keyed up to the ordeal and so the sight of all the surgical paraphernalia and trappings seems natural. But the visitor to the young general practician ordinarily prefers to see less evidence of operative ability. Yet, in the face of these arguments, the modern doctor fully realizes the desirability of sterilizable furniture and so hesitates to surround himself with dust- and germ-collecting objects.

The happy medium in this dilemma will be a room finished as described, and provided with one or two easily removed rugs. The desk and book-cases are of plain polished oak, as are the chairs for the doctor and the patient at his desk. An oak bench will seat waiting patients, while a small nearby table serves to hold a few magazines. A fresh supply of reading matter should always be maintained—soiled periodicals are an abomination, neither do people care to read the same old story each time they call.

The instrument-case should be opposite the desk, and the operating table (better than a chair) near the window. Both articles should be of enameled metal; the instrument-case will have glass trays and at least two full-sized drawers beneath for dressings, etc. An enameled washstand with pitcher, basins and irrigator is an essential, unless the room has running water and fixed toilet appliances. These articles should invariably be of white-enamel ware; the instrument-cabinet and table may be finished in any desirable style, but must be varnished or polished. If the commercial current is available, a good wall-plate giving the various modalities and a first-class vibrator should be in evidence, the wall-plate naturally being placed near the surgical table, while a "dressing stand" (glass and enameled steel) will be found useful to hold the attachments. When other instruments are to be used they can be brought forward in enameled trays; two or three of these should always be ready for use in one of the drawers of the cabinet.

For Heating Water

Some device for heating water must be installed, a gas or alcohol stove serving excellently. A supply of clean towels (small and medium size) together with two or three sheets and a blanket should be ready always. It is a splendid idea to have the washstand equipped with two uprights, one supporting the irrigator, the other a glass tank containing plain sterile water or some mild antiseptic. The doctor so equipped can, in five minutes, have his instruments boiling in the water and everything ready

for even a major operation. "Between times" the room, though it looks professional, does *not* look "operaty," as I have heard it expressed. The instruments imperatively needed are a stethoscope, clinical thermometer, minor operating case, rectal and vaginal specula, laryngoscope, nasal and aural specula, tongue depressor, applicators, set of urethral sounds, head mirror, hypodermatic and hard-rubber syringe with assorted tips, obstetrical forceps, placenta forceps and uterine curets (plain and irrigation). Other instruments will be added as necessity arises.

A few good pictures on the wall and a pretty flower-filled vase on the desk add much to the attractiveness of the office. Most young doctors (and some older ones) have *someone* who will keep the vase filled! "Someone's" picture might, quite properly, have the place of honor on the desk. Circumstances of course alter cases: occasionally the young doctor will wisely keep people guessing who the "someone" will be. His practice will not fall off during the period of suspense!

Dispense Your Own Medicine

The most important "furnishing" of all I have, intentionally, left till the last. The doctor who hopes to excel must practise *medicine*, and to do that properly he must have efficient medicines. Wherever it is possible he will dispense his own remedies, and in these days this is an easy matter. It is not at all desirable (for the young doctor at least) to "put up" liniments, stock elixirs or prescriptions calling for nice pharmaceutical work—that work belongs, naturally, to the dispensing pharmacist—but simple dilutions, tablet-triturations, alkaloidal granules and compound tablets he both can and should dispense, not alone at the bedside but from his office.

Thousands of physicians are now dispensing in precisely this way every day in the year, and these men have the satisfaction of knowing that their patients get just what they intend they should receive, and when they need it; nor are their patients able to procure indefinitely further supplies of the

remedy that "did the work" without paying a fair *quid pro quo* to the man whose trained intellect and diagnostic acumen made a correct selection possible. Moreover, if Mrs. Jones, thinking her malady precisely similar to that of Mrs. Smith, desires to take the medicine which cured the latter, she must go to the doctor for a supply—*not* to the druggist who put up Mrs. Smith's prescription; and the doctor (as is right) will proceed to give her the medicine she really requires and, incidently, will collect the fee, for which he usually has good use. It may not be so profitable for the druggist, *but* decidedly far more satisfactory for the "young doctor." If he doubts, let him try it and see.

The "Dispensing Department"

The "dispensing department" need not be extensive at first. A very small oak cabinet with shelves and a drawer or two for envelopes, vials, cartons, etc., will serve every present purpose. If the alkaloids are used, a case three feet by two feet, or less, will carry practically every essential. Bulk goods, effervescent salts, ointments, etc., can very conveniently be kept in a bottom drawer of the desk. If a cupboard be in the room, supplies will naturally be kept there. Remember, patients like to see medicines displayed, and so a neatly made oak wall-case with drop-front (which when down furnishes a practical desk) makes, when filled with bottles of alkaloidal granules and tablet-triturations, a very satisfactory showing.

After making his diagnosis, the doctor takes his seat by his medicine-cabinet, selects the bottles he desires, fills into envelope,¹ carton or vial the necessary amount of the medicine, and places on each package a key-number indicating the drug or formula it contains. If afterward the container is returned with the request for more of the same medicine, the doctor may know instantly just what is required. Experience has proved that it takes no more time to dispense in this way than it does to prepare and register properly a prescription.

A thoroughly equipped medicine-case is the last essential. Its character will de-

pend a good deal upon the circumstances under which the doctor works. If he walks or drives, he should carry a case large enough to contain a sufficient supply of a large-enough-variety of drugs to enable him to meet any possible demand. As a rule it is impossible to say when one goes out what disorders will be encountered: today one or two drugs may suffice, tomorrow possibly a dozen may be required. Again certain pathologic conditions may seem to exist all along the line, and so the demands on certain vials may be tremendous. Hence the more commonly used drugs should be carried in greater quantity, and the condition of containers should be ascertained on each return to the office. Beside the large case, a small "emergency" case, containing a hundred doses or so of such drugs as glonoin, strychnine, morphine, digitalin, cactin, apomorphine, etc., should always be carried in the vest-pocket. The physician thoroughly familiar with the drugs it contains will find himself able to meet successfully many a dire emergency.

The Doctor's Stationery

Finally, the young doctor should supply himself with good stationery. The style of type and size of paper are matters of individual taste, but it is very desirable that economy, if it must be exercised at all, be practised elsewhere than here. Colored paper is not to be considered: professional gentlemen use only plain white or cream laid paper for their correspondence. Plain half-sheet note paper bearing the doctor's name,

office address, telephone number and office hours set in small Roman type is desirable. An engraved letterhead is of course always preferable, if a slightly greater cost is not considered, while an embossed monogram adds materially to the tone of professional stationery. Cards, statements, receipts and prescription blanks should all be of similar chaste character. The large printing concerns are always ready to supply specimen sheets on request. Large type and colored ink, like tinted paper, are sedulously to be avoided. Incidentally, if the doctor is a poor penman, as many are, he will find a typewriter a most useful piece of office furniture, both for correspondence and for preparing articles for the journals—as all good doctors do. Good small machines answering all ordinary purposes are procurable at very reasonable prices.

At this point it may be well to mention the necessity of possessing a legal account-book. There are on the market all sorts of "physicians' ledgers," but the young beginner will do well to procure one of the accepted (and legal) systems which enable him to keep plain track of a stated number of patients, daily and monthly, to the end of the year. Possessing such a book, he should see to it that his accounts are posted daily, while on the first of every month he should mail his statement. Some kind of settlement should be secured within six months. There is no merit in working hard for half a century and then leaving nothing to your widow except the now somewhat worn—
OFFICE FURNISHINGS!

"The men who try to do something and fail are infinitely better than those who try to do nothing and succeed."—The Caxton Magazine.

A New Method of Treating Prostatic Diseases

By C. S. NEISWANGER, M. D., Chicago, Illinois

Professor of Electrotherapy, Postgraduate Medical School, Bennett Medical College,
and President Illinois School of Electrotherapeutics

DUBOIS RAYMOND, in his experiments, observed that "heat coagulates the muscular plasma and brings about an *acid* condition;" also, "a muscle that is fatigued assumes an *acid* condition." Schiff makes the observation that "veratria renders the muscle rigid, unirritable and *acid*."

We know today that the anode of a continuous current attracts oxygen from the body-fluids. Oxygen is an acid maker. Therefore, the part in connection with the anode is rendered acid.

What is the significance of this acid condition of tissue?

Significance of an Acid Condition of the Tissues

It may not be new to you, because it has been discovered, as far back as 1859, by Funke and other observers, that the beginning of the death of any tissue, nerve or muscle is marked by a progressive acidity and subsequent coagulation of the muscular plasma. I have used the phrase, "the beginning of the death," but I do not mean that the tissue is going to die. I only use the phrase to express a certain condition—an underactive condition.

It is also a well-proven fact, first observed by Schiff, that all overactive conditions are alkaline, and that inflammatory lesions are due to excessive alkalinity of the part. Did you ever stop to think that your patient could not have pain with an acid condition, that it is impossible that an acid condition is absolutely *against* pain? Do not bring up the question of rheumatism, which we have been treating upon a wrong pathologic conception for a hundred years, since the deposit in articular rheumatism is not uric acid but urate of sodium, and sodium urate is not an acid but an alkali. And the same thing that causes pain in rheumatism causes it anywhere else in the human body—alkalinity.

Within the past year I have devised an electrode for the application of heat and galvanism to the prostate gland, the seminal vesicles and the female pelvic organs, which I shall describe, giving the technic of its application.

Electricity and Heat in the Diseased Prostate Gland

There seems to be no doubt in the minds of thinking physicians but that prostatic disturbances and their sequelae are the most serious lesions for which they treat men. The symptoms are often so varied and diverse as to mislead any but the astute diagnostitian, who, not finding the gland hypertrophied, is likely to look for the trouble elsewhere.

While my former methods of treating the prostate have been productive of much good and have brought favorable comment from many physicians, they were by no means ideal.

The method I am about to mention here, however, is much superior in many respects and does not necessitate entering the urethra.

If you were called upon to treat an irritable gland that was accessible and in plain sight, the first remedy you most likely would think of would be *heat*. If you understood something of the therapeutic properties of electricity you would undoubtedly combine this heat with positive galvanism: the heat, because, as previously stated, it coagulates the muscular plasma and brings about an acid condition, which means, an *underactive* or *sedative* condition; the positive galvanism, because it also begets an *acid* condition and relieves congestion by constricting the blood-vessels.

When the prostate is the gland involved, the seat of operation is not very accessible nor in sight; therefore, if we would employ these two valuable therapeutic aids, we

must devise some special means for their application.

The Technic Explained

A two-pronged fork is a simple instrument, yet it has taken a thousand years to develop it; and although it might seem a simple matter to apply heat and positive galvanism to the prostate gland, it is not so easy to accomplish as it seems. First, because the applicator must be kept at an even temperature; and, second, the metal comprising the conducting portion of the electrode must



No. 1. Showing electrode uncovered

not come in contact with the mucous surface being treated.

The electrode I have devised and which answers the purpose admirably is shown in the accompanying illustration. It may be described as follows:

A soft-rubber rectal tube about 15 inches long and having a caliber of 32 F. has the distal end perforated with small holes for a distance of 2 3-4 inches.

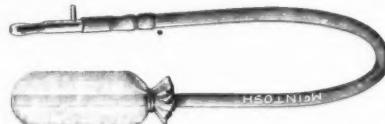
The tube is fitted its entire length with a spiral wire composed of galvanized iron. To the proximal end of the spiral wire is permanently attached a metal fitting for the tube of an ordinary fountain syringe, and to this is soldered a receptacle for the conducting cord from the battery. To the perforated end of the tube an ordinary gold-beater-skin condom is firmly tied so as to include all of the perforations within the skin bag.

The fountain syringe, containing about one quart of normal salt solution at a temperature of 125°F. is placed at an elevation of about six feet.

Place the patient in Sims's position with the usual wetted pad on the abdomen attached to the cathode of a continuous current. After having thoroughly wet the skin bag, inside and out, force out all the water through the perforations, lubricate well and

introduce into the rectum to cover the prostate. Slip the rubber tube from the syringe over the end of the electrode and allow the hot water to run until the bag is filled. Now fasten the tip from the anode of the battery into the receptacle on the electrode and turn on current until 30 to 40 ma. is reached. Continue the sitting for ten minutes, and repeat three or four times a week.

It is always best to have a "cut-off" on the syringe tube so as to allow only a sufficient flow of water to fill the bag, otherwise



No. 2. Showing electrode with skin bag attached filled with water

the pressure is liable to break it. The patient is always able to tell when the bag is filled.

A few cases from actual practice will serve to illustrate:

Case 1. Mr. M. B. J., aged 82, dairy farmer; veteran of the Civil War; had never missed a day's work from sickness until six months before coming for treatment, when he gave up business altogether. Upon examination I found the prostate gland symmetrically enlarged to the size of a small orange. Two strictures in the pendulous urethra had been treated by gradual dilation until he had an infected bladder. He was obliged to urinate from seven to ten times during the night. I treated the cystitis with hot boric-acid irrigations and reduced the strictures by electrolysis, at the same time using the heat and positive galvanism to the prostate as has been previously described. He improved very rapidly and was provisionally discharged in five weeks. He writes later that he is entirely relieved and has resumed business.

Case 2. Mr. B. J., aged 79; attorney; general health fair; micturition very frequent; bowels very constipated; no other complications except extreme nervousness. I applied heat and positive galvanism to the gland for ten minutes four times per week,

using 40 ma. Gland of normal size and consistence, with subsidence of all other symptoms, after two months' treatment.

Case 3. J. A., physician; aged 45; chronic inflammation of the seminal vesicles with partial impotence for several years; no sexual desire; prostate gland not much enlarged, but sore and irritable. I administered three treatments per week of heat and positive galvanism, resulting in complete cessation of all symptoms in two months.

Case 4. Mr. A. K., aged 40; politician; decidedly neurotic; said he had been treated for stricture for nearly two years and was still taking treatment, but was much discouraged; had a colorless discharge which the advertising doctor told him was semen and that his "life blood" was ebbing away. Upon examination I found the discharge to contain no spermatozoa, but was simply

prostatic fluid. The prostate gland was somewhat enlarged and very irritable; urethra very hypersensitive; prostatorrhea. As a No. 32 F. sound could be easily passed, I concluded there was no stricture. I treated him with the heat and positive galvanism four times per week, using a weak solution of cupric sulphate in place of the normal salt solution. He was entirely relieved in five weeks.

There are several points that may be emphasized regarding the treatment, namely: The solution used in the skin bag may contain any desired medicament to be used cataphorically. The treatments are easily administered if you are prepared to give them. They are of the greatest value in treating an irritable retroverted uterus. Enuresis yields quickly to them. They are indicated in any lesion dependent upon an irritable rectum.

The Young Doctor and the World

A Confidential Talk with the Recent Graduate

By WILLIAM FRANCIS WAUGH, A. M., M. D., Chicago, Illinois
Dean of Bennett Medical College

ASPRING opens, the bees get ready to swarm and the colleges prepare to send forth their new brood of graduates. Laugh as we will at the haughty youngster with diploma under his arm, who stands on the top step of Alma Mater's stairs and looks forth on the world with fearless heart and conscious readiness for the fray—joke him on his lofty expectations, we yet respect him for his aspirations, envy the powers and possibilities of his ebullient youth, and heartily wish him all the success he expects. There is ever a delightful possibility about youth. The coming avatar may stand before us; and among the crowd of youths, ready and eager to lend their aid, there are surely some Emersons, Edisons, Roosevelts or Burggraevs, who may give the slow old world a notable push along the road of progress.

The newly graduated doctor will find opposition in plenty, and that of kinds that will make him hot under the collar, for he will realize that justice is not being meted out to him, and the excuses that seem valid to him receive scant attention from others.

The young doctor will soon realize that the possession of qualifications is of little avail unless he finds means of letting people know of them. Yet this must be done ethically. The older men already in the field will be ready to seize the slightest pretext to set him down in the public estimation.

Don't get angry—just think how you would feel and act in similar conditions. Yes, you get hot right away, and say that under all circumstances you would give your competitor a square deal. But papa's dollars are still keeping your pocket warm.

—wait till you have nothing to jingle but keys; and the rent due.

Study the code of ethics to guide your own steps rather than to pick flaws in the other man. Act up to the Golden Rule. Speak naught but good of man or woman; and if their deeds are evil, try to find excuses for them. No man can talk against one who speaks only good of him, and some day you'll need excuses yourself.

Be circumspect, especially with women. Innocence is not always a sure guard, and the appearance of evil may blast a career. Act as knowing that somebody is watching for a chance to find fault and to put the worst construction on your acts; but never neglect your duty or shirk it through cowardice. "Be just and fear not."

How to Win Reputation

The best way to win reputation is to deserve it. Be honorable, and scrupulously honest in the slightest thing. The habit of honesty grows; its cultivation and that of truthfulness develop character; and the shafts of malice fall harmlessly from one we know to be incapable of the meanness charged. Begin with the determination that you can have carved on your tombstone these words: "I have never knowingly wronged any human being."

Location

Drop any thought you may have of finding a location where there is no doctor. A man wrote to me about the time I was graduated, telling me there was no doctor within twenty-five miles, and one was needed badly. He had boarded the last one; also, he had a number of medical books he would like to sell! Even in my inexperience I recognized the tragedy and sheered off. Two doctors in a place will get more practice than one. Ten in a town will attract patients from miles away, for there must surely be one good one among so many. If there are but few they stay in town; if many, they cover the country round about.

Practice comes quicker in smaller places; it is very slow in the city, unless the young doctor has the great good fortune to be

taken in with an older man. By all means settle in a growing, developing neighborhood, not in a moribund, decaying, retrograding place.

Specializing

It was formerly the custom for a doctor to do general practice before he adopted a specialty, and this is the best plan yet, although it seems slow to Young America. Howard Kelly started the quick method, commencing to do oophorectomies before the ink on his diploma was dry. The special organs are all parts of the body, and a knowledge of general conditions is essential to correct specialty work. The eye and the uterus command the greater number of specialists, hence must offer the most opportunities. Good aurists are extremely rare, and deafness is far too common. Nearly everybody offers work for the nose and throat man. Rectal cases flock to quacks because so few regulars treat them skilfully. Genitourinary cases go to the druggists mostly, because too little attention is given these maladies by the general practitioner, and it is a "give-away" to resort to the specialist.

For all specialties the best field is the smaller city or larger town, unless one can get in with an established man in the metropolis or on the staff of a college or hospital. Some men do well by starting in a small town where they secure a following, then move to a larger one, near enough to be in reach of the former, and thus widen their sphere.

Advertising

How to "advertise" *without* advertising, or better, how much one may advertise without being unethical, is the serious problem. The customs of a community control. In Paris the doctor may not put out any sign. In Philadelphia the sign must be very small and inconspicuous. In many of the smaller towns each doctor carries a card in the local paper. Thus, follow the rule of the place.

Meanwhile, get acquainted and make friends. Join the lodges, go into every

public movement, take a full man's part in affairs. I can not get over the feeling that to use the church for business purposes is sacrilegious; yet if a man is a church-member by conviction, it is right for him to be active and useful in the work, and to render services to the church's poor. It is different with society; for what is it for, if not to get people acquainted, so that each may find those congenial to him as associates.

Business

More physicians fail on the business side than those of any other calling. Necessarily so; for sickness demoralizes the household finances, cutting off income and piling up expenses and debts, so that we too often find our earnings due from patients treated swallowed up in the ensuing family bankruptcy. We err by putting too low a valuation on our services, also in not demanding payment at once from strangers. One doctor I know of used to ask for his fee on entering the house of an unknown patient. If excuses were made, he would say: "Your neighbors, who know you, will advance the sum. If not, you can't expect me, a stranger, to trust you when they will not." With that he would take himself off. His fee was twice that of his competitors. Result: they got the deadbeats. But if anybody was very ill this strict man was called in, and he always got his money. He was taken on his own valuation.

To make this an inflexible rule would be heartless cruelty; yet I have known no cruelty so heartless as that of patients who had had good service, were able to pay and would not, laughing in the face of the doctor, desperate in his need of money. Be not silly—neither brutal. Respect yourself, charge well. But be not greedy, nor grind the needy. Also, collect while the gratitude that opens the purse is yet warm.

Equipment

In my student-days a druggist gave me a catalog of Charles Ellis' of Philadelphia, in which I found a one-hundred-dollar outfit suggested for the physician. I studied

this, asking why each article should be selected, in what diseases it could be used, the frequency of such diseases, the doses; and the quantity likely to be required; also the best preparations. Then I took the Dispensatory and studied up each article, asking whether it might be added with advantage; comparing, cutting out, and so on, until I had prepared a one-hundred-dollar list of my own.

That sum would be enough today, so far as drugs alone are concerned; but even a beginner may spend a thousand dollars in his equipment, without counting an automobile. The drugs are not now the ancient crudities, but a wall-cabinet, with large and small carrying cases, filled with active principles and pure chemicals, ready to use, perfect in preparation, and keeping virtually forever without deterioration. By excluding the useless dirt we are able to carry 30,000 doses in our overcoat pocket-case—and that is enough if well selected. In the 108 vials we may, by utilizing granules and tablets, or different colors, include an assortment of 216 remedies; and even a very careful prescriber can get along with that number, when supplemented by his office supply.

Besides, the doctor must have his emergency, surgical and obstetric cases, and such an outfit of electric and other apparatus as his special inclinations or opportunities suggest and his purse affords. These things are good to draw trade, and capable of affording great benefit if employed understandingly.

One ought not to lay in an expensive outfit of useless things, to gather dust, to be always out of order when needed, and to become obsolete in a few years and fit only for the scrap-heap. Buy what you need as you need it, and *only* what you need; then get the latest and best.

Same as to books. Get them as you need them, but always have on hand two to four new ones, to keep up with the advances. Get a few journals, but not more than you can read. One good weekly and three or four good monthlies of the sort that give you the most help when you need it will keep you up in recent advances and

afford you an opening for your own work. For you must begin at once to record your experiences and your beliefs and put them before your fellows. Few realize how it clarifies one's ideas to submit them to the great big public. A few rude bumps render us cautious; we study before we speak, and try before rushing into print; we do better work, and we learn more than if we keep

quiet and fence ourselves in. By all means take your local journal, read it, write for it, and realize that as it represents the local profession you are included, whether you support it or not. See that you get into the composite picture.

And after all this good advice, I am morally certain each and every one of you will just do as you darn please—and I'm glad of it.

The New Doctor's Opportunity

Or, Medical Emergencies and How to Meet Them

By W. C. ABBOTT, M. D., Chicago, Illinois

JUST now there is a stir and stress in the medical colleges, and a new brood of doctors is preparing to swarm. Where each will alight is a question, but it is safe to predict that, following the universal law of animate creation, the location of the queen bee will decide the choice.

It may also be taken for granted that the field for the exercise of his profession will be found already fully occupied. Darwin said there was not anywhere to be found a location where animal or plant could secure a foothold and a living, but several competitors would be found engaged in a conflict, *a l'outrance*, to secure or maintain their hold upon it. Man is by no means exempt from this struggle for existence, for is he not part and parcel of animate nature?

The Struggle for Existence

The fellest fight is that between man and man. Our pioneer fathers felt the competition of their nearest kin so deeply that they deserted civilization and all therein implied, turned their back on home, relatives, luxuries and comforts, and dared the savage wilderness with all its loneliness, its perils known and possible, in the effort to escape from the struggle.

Rifle within reach they felled the forest, broke the soil, planted crops and reared their shelter, standing off the wild beasts and wild men, and built their homes, only

to find that others followed the trail they had blazed, and in a few years they had again to set out in search of what they denominated "elbow-room," that will-o'-the-wisp, freedom from the necessity of struggling against the encroachment of their kind.

Go where he will, the young graduate will find the doctors already there quite decided and unanimous in their advice for him to "move on;" there are more there already than can make a living. Statistics show that America has about one doctor to each six hundred people, double the proportion in Europe. But statistics fail to add that much more is expected of the American doctor, and that people resort to him for more maladies than in Europe, in some parts of which the doctor is only called by the common people when the patient is at the door of death. To care for the health of six hundred people properly is work enough to keep any doctor busy.

Now—Your Shingle Is Out!

To return to our beginner—he has settled down, opened his office, hung his shingle out, and—what then? Let him ask himself the plain question, why should anybody call on *him*, when there are available men of experience already known, who have established their reputations by years of faithful service? The answer should be,

the new man's opportunity will come when there is a sudden need and the others are out of reach.

Sudden needs, emergencies, as a rule give the new man his opportunity; hence it behoves him to consider what emergencies are likely to occur and how he may best meet them.

On such occasions every near-by doctor is usually sent for, and the one who gets the case is he who reaches it first, best prepared to meet the emergency. I once took a lucrative case from another doctor; it was an attempted suicide—throat and wrists slashed—and the other doctor was armed solely with pencil and prescription pad. I had my ready-for-anything outfit, both of instruments and medicines, right with me, and was applying ligatures to the spouting arteries long before his sent-for apparatus reached the battle-field.

Have Emergency Case Ready

The emergency-practice case should be carefully selected, filled, and held ready to be grabbed at an instant's notice, without waiting to find any essentials: A small instrument-case, with every instrument in perfect condition; a hypodermic syringe in good working order, with tablets of hyoscine, atropine, strychnine, apomorphine, pilocarpine and H-M-C; a fountain or bulb syringe; bandages and gauze, anti-septics, tourniquet (if in a manufacturing community where accidents are common), plaster, and a head-reflecter; a bottle of anesthaine or other good local anesthetic; and a case of concentrated remedies, preferably the active principles, in shape for instant administration.

The liquids were always objectionable, as liable to leakage or breakage. My first case had a bottle of brandy—but somebody drank it. I substituted aromatic spirit of ammonia—it blew out the cork; carbonate of ammonium—it evaporated; then, seeing the light, I depended on glonoin, strychnine and capsicin and had no further trouble. The hyoscine-morphine-cactin tablet has banished the cans of ether and chloroform, and saves weight and bulk, as the

strychnine, glonoin, and digitalin have the brandy, besides being useful in many other ways.

Some Emergency Remedies

The selection of remedies depends on the emergencies to be met, depending upon environment and condition. What may they be?

Asthma.—Apomorphine or hyoscine, morphine and cactin hypodermically; glonoin, hyoscyamine and strychnine.

Asphyxia.—Glonoin, hyoscyamine and strychnine.

Childbirth.—Forceps, strychnine, atropine, H-M-C, ergotin, quinine.

Chills.—Pilocarpine, atropine, "antispasmodic" (glonoin, hyoscyamine and strychnine).

Cholera.—H-M-C, atropine, calomel, zinc sulphocarbolate.

Choking.—The bolus usually lodges in the pharynx and can be easily removed by the finger and thumb, or by an apomorphine hypodermic.

Collapse.—Glonoin, hyoscyamine and strychnine, hypodermically.

Colics.—Glonoin, hyoscyamine and strychnine (antispasmodic triad) or H-M-C.

Convulsions.—Pilocarpine, apomorphine, calomel, H-M-C.

Croup.—Calcidin, apomorphine.

Delirium.—Veratrine, gelseminine, H-M-C.

Drowning.—Glonoin, hyoscyamine and strychnine (the antispasmodic again).

Fainting.—Antispasmodic, digitalin.

Fevers.—Veratrine, aconitine, digitalin, strychnine, gelseminine, quinine.

Hemorrhage.—Atropine, veratrine, glonoin.

Hernia.—(Strangulated)—Antispasmodic triad or H-M-C.

Hysteria.—Apomorphine, gelseminine.

Indigestion (acute).—Calomel, hyoscyamine, strychnine.

Insomnia.—Hyoscine, gelseminine, digitalin, apomorphine, calmine (a compound tablet).

Neuralgia.—Glonoin, hyoscyamine, and strychnine; gelseminine, aconitine, veratrine.

Pain.—Gelsemine; glonoin, hyoscyamine and strychnine; H-M-C.

Diarrheas and Dysenteries.—Calomel, atropine, zinc sulphocarbo late, emetin.

Sunstroke.—Veratrine, aconitine, gelsemine, atropine, the triad (glonoin, hyoscyamine, and strychnine).

Vomiting.—Calomel, zinc sulphocarbo late, atropine, emetin, small doses of H-M-C hypodermically.

Gathering up the remedies suggested we have the following list: Apomorphine, atropine, aconitine, calcidin, calmine, calomel, digitalin, elaterin, emetin, H-M-C, ergotin, glonoin, gelsemine, hyoscyamine, hyoscine, quinine, strychnine, veratrine, pilocarpine, zinc sulphocarbo late.

Six of these are in the hypodermic case. Quinine, zinc sulphocarbo late and calmine would best be carried in separate bottles as they are too bulky for the small granule vials; but the other twelve fit nicely into one of the little vest-pocket cases, bottles containing 100 granules each, except calcidin, which should be in powder, in 5-grain capsules, or they may be carried in the smaller vials of a larger, more convenient practice case which will also afford room for those of larger bulk.

Knowledge and Skill Necessary

Here we have a complete outfit of the remedies that act most effectively and most quickly in any of the emergencies to which one is at all likely to be called. The other essential is the knowledge and skill necessary to utilize them. I am necessarily leaving out the resources to be found in every household: acids, alkalis, spices, mustard, oil, flour, etc. It's a poor sort of doctor who can not improvise a splint or other temporary dressing out of material at hand.

The "antispasmodic" combination of glonoin, hyoscyamine and strychnine is so frequently indicated that it is advisable to have it in a single granule for speedy administration. Glonoin relaxes vascular tension and sends a flood of blood to the brain; hyoscyamine prolongs and deepens both actions; while strychnine arouses the vital

forces, restores central control, and energizes all the vital functions. This makes the combination available in a multitude of cases.

In *apoplexy* one must learn to decide quickly if the pulse must be relaxed with veratrine or venesection, the bleeding stopped by atropine, or the vital functions sustained by strychnine.

In *asthma* the paroxysm may be relieved, sometimes, by the application of ice or mustard over the pneumogastric in the neck (it always helps) or more promptly by a hypodermic of H-M-C or apomorphine, or by the glonoin, hyoscyamine and strychnine combination.

The treatment of *asphyxia* depends on the cause; the preceding fills many needs. Strong support should always be given and elimination should promptly be instituted.

Chills may be aborted in the strong by a full dose of pilocarpine, inducing sweating at once; in the weak by giving enough atropine to forcibly dilate the cutaneous capillaries; in either case relaxing tension and relieving the internal congestion.

Choleraic attacks give way to the hyoscyamine-morphine combination; the vomiting stops under calomel if the cause is local, gastric, or as the excited pneumogastric comes under the quieting influence of atropine. Mycosis is subdued by the sulphocarbo late. In systemic cases prompt saturation with calcium sulphide is called for and elimination always, with full doses of the bacillus bulgaricus.

The numerous medical indications occurring in *childbirth* are all provided for in the little case.

Collapse and debility in any alarming form are simply met and relieved, *cito, tuto et jucunde*, by the glonoin, hyoscyamine and strychnine combination.

Colics are also relieved by the same triad (or H-M-C) whether ordinary hepatic, renal or lead; and the cases not so relieved should be subjected to surgical treatment without delay.

Convulsions may be toxemic like eclampsia, demanding pilocarpine and veratrine; or digestive, calling for emetin, apomor-

phine or calomel with saline to follow, or nervous, demanding apomorphine or gelseminine; or one of the two powerful triads, hyoscine, morphine and cactin, or glonoin, hyoscyamine and strychnine.

Croup in its earliest hours calls imperatively for calcidin, 1-3 grain every five to ten minutes; later for apomorphine, emetin or veratrine to loosen and remove exudates. Clean out the bowel promptly.

Delirium, if high, needs gelseminine; or veratrine, if toxemic, or if anemic glonoin, atropine and strychnine.

The remedial treatment of *drowning* is the antispasmodic triad to send blood to the head and arouse the suspended nervous activity.

Fainting is cerebral anemia—the preceding triad stops that. Remember that nearly all remedies, except aconitine, for prompt results, may well be given hypodermically. Stomach action in many conditions, especially when this issue is involved or on a strike, is all too slow and undesirable cumulative results too often follow.

Fever demands aconitine and digitalin; the one to relax the spastic vessels, the other to combat the paretic ones; adding veratrine in sthenic, toxemic cases, strychnine in asthenic forms, quinine for periodicity. And always elimination with the salines.

Hemorrhage requires glonoin to send blood to the head at once and stop fainting; veratrine to moderate vascular tension and excited heart action; atropine, to full effect (this is absolutely essential) to stop the loss of blood.

The value of a full dose of *hyoscyamine* with strychnine to follow, in the treatment of strangulated and irreducible *hernias* is one of the things that cannot be appreciated without a trial. But a trial is one potent means of promptly opening the mind to realization of the tremendous possibilities inherent to the applications of the alkaloids.

Hysteria is not a diagnosis, but it must be relieved and immediately, and then we must seek for and treat what underlies it; but a hypodermic of apomorphine puts a stop to a lot of pure cussedness, or its feminine equiva-

lent; gelseminine holds sexual impulses in check and relaxes tension, mental and moral as well as somatic.

Acute *indigestion* stops with a little calomel every fifteen minutes; fermentation ceases under calcidin and the sulphocarbonates; acid fermentation is promptly albeit temporarily relieved in its expression by alkalis (as sodium and xanthoxylin compound), is controlled centrally and effectively by atropine, and gastric motility is aroused by strychnine.

Insomnia calls for a study of vasomotor conditions. How beautifully veratrine brings rest by eliminating toxins; digitalin by restoring normal tone to the cerebral vessels; gelseminine quiets spinal and sexual irritability, reflexes and pain; solanine provides the needful cerebral anemia; or hyoscine restores the nervovascular equilibrium; while caffeine valerianate removes the sense of fatigue, somatic or psychic, that inhibits slumber. Calmine is invaluable in all cases for relief while the real cause, often yielding to sleep, is being sought for and treated.

In *neuralgia* we have a specific for the cutaneous vascular spasm and centric engorgement in the glonoin, hyoscyamine and strychnine triad, while veratrine, aconitine, gelseminine, quinine and laxatives find their indications in the study of various cases.

The treatment of *pain* in general would require a book for its adequate discussion. There are no varieties that will not give way to these remedies properly used, except the pain of actual structural constriction, which demands mechanical relief.

Poisoning requires acids (vinegar, lemon juice), alkalis (soda, magnesia, chalk and lime), demulcents (eggs, milk and flour), evacuation of the stomach, dilution, antidotes, anodynes, supports.

Irritation of the bowels calls for removal of the irritant; soothing, rest, quelling pain, quieting peristalsis, checking abnormal excretion and reestablishing normal secretions—all amply provided for in the little case.

Sunstroke requires the application of cold; with veratrine, aconitine, gelseminine or pilocarpine in sthenic, toxemic forms; glono-

in, hyoscyamine and strychnine in heat exhaustion.

Vomiting stops if the irritant is ejected under emetin, toxins neutralized by calomel, the irritated vagus soothed by atropine, toxemias lessened by pilocarpine, mycosis stopped by the sulphocarbolates. Morphine, hypodermically, in small doses for immediate relief.

Other indications will occur to each reader—especially when he gets to work. There's no end to the fool things humanity will do to itself, and the observations of "the humorous yeggman" are commonplace rather than exceptional. But one may go many years without meeting any sudden call that requires treatment beyond this little case's capacity, when added to the resources to be found in the household; and applied with

the dexterity that comes from knowledge of disease, of remedies, and of men.

The practice-case, unless combined with this, as earlier suggested, is of course more comprehensive. It should be much larger, carrying more vials and more of a kind, as varied as conditions demand, and should likewise be ready, while the emergency outfit described may well be accommodated in the roomy pockets of the usual man, or the ever-present handbag of our sisters in the profession.

Be prepared for what usually comes in a rush—to know what to do, have the means at hand, and then do it.

Many a young doctor's success dates from the day(or night) in which he handled an emergency case with promptness and dispatch.

A Case of Puerperal Eclampsia

Having a Fatal Termination

By F. J. BALDWIN, M. D., Merriman, Nebraska

MRS. B., a primipara, thirty years of age, of slight but rather firm build, called me, on March 12, on account of morning sickness. She had gone some two weeks over her period. I told her she was pregnant, and gave her bismuth subnitrate and cerium oxalate, also some saline laxative. Called up on the telephone about three days later, she informed me that she was much better. Did not hear from her again until August 24 at 10 a. m., when I was to come at once, the woman being asleep and could not be awakened.

The Woman Found in Coma

I found her in coma, with a hard-tensioned pulse of 95 per minute; the breath was foul and tongue coated; water had broken. The husband informed me that she had been feeling good on Sunday, bowels had not been constipated at any time, and she was passing a normal amount of urine. He left early Monday morning for his work and did not see his wife again until called

Tuesday, the same time as myself. I had been there only about ten minutes when the patient was seized with a hard convolution. So I at once telephoned to Dr. Evans, at Cody, Nebraska, for counsel, who, however, could not get there until four o'clock that afternoon. Meanwhile I gave a hypodermic injection of veratrine, 4 granules, and inhalations of chloroform, washed out the bowel with copious amounts of hot salt solution, and put her in a hot-pack as soon as possible. Examination revealed the os quite firm—could not introduce the finger—and the os and vagina were packed with sterile gauze. The convulsions lasted for more than forty minutes. I continued giving the veratrine every hour, also administered one full-strength H-M-C tablet hypodermically. At 4 p. m. the pulse was 120 but softer, respiration 30, coma deep, nevertheless she would swallow water which we put in her mouth every fifteen or twenty minutes.

When Dr. Evans arrived he agreed with me to deliver at once by manual dilation.

The nurse shaved and washed the patient, removed the tampon, put her on the table, and washed out the vagina with 1:500 chinosol. The catheter brought about two ounces of dark-colored urine. The os was softer. Working slowly, we delivered the woman, in about one and one-half hours, of a very poorly nourished seven-month fetus. Then she was put in bed, surrounded by hot-water-bottles. The pulse now was 130 and of good volume, respiration 30, temperature 101° F. We gave one ounce of castor oil, 30 minims of fluid extract of jalapa, and continued the veratrine in smaller doses.

Counsel returned home at 8 p. m. while I remained until 8 o'clock next morning. One convulsion occurred at 10 p. m., and this was the last. The patient was very restless after midnight, so I gave a half-strength hyoscine-morphine-cactin tablet at 1 a. m., after which she rested quite well, although in deep sleep. I left six 1-6-grain podophyllin granules, one to be given by the nurse every thirty minutes, followed by three teaspoonfuls of saline laxative; also tablets of intestinal antiseptic, two of these, crushed, to be given every two hours. As a result, the bowels moved ten or twelve times during that day and night (Wednesday), and the woman showed some signs of consciousness, opening her mouth when asked whether she wanted some water.

The Patient Is Much Improved

I saw her again at 7 o'clock that evening, finding a pulse of 110 beats and tension about normal, with temperature 101° F. Her urine was now passing freely, while she noticed noises around her. Thursday morning at 7 o'clock the nurse reported the patient very much better, and I ordered some buttermilk to be given. She drank a little of it but did not like it. At noon she was reported to be resting well. I saw the patient at 7 p. m., when she said she was hungry and wanted some coffee and grape-nuts; said, "I have been sick two or three days." Her pulse now was 100, tension normal, lochia normal and without bad odor, breath sweet, tongue moist and clean. I

gave another dose of jalap, continued the intestinal antiseptic and ordered grape juice with a little lemon juice for drink, she consuming about one-half glassful of the latter up to 2 in the night. This caused her bowels to move several times.

The Temperature Is Rising

At 6 o'clock that morning (Friday) the nurse telephoned that the patient's temperature was 103° F., pulse 130, respiration 30, pupils dilated one-third but reacting to light, coma deep; there was tympanites, no rigidity of abdominal muscles; lochia were normal in amount and odor, tongue was clean and breath sweet, looking similar to that seen in a very bad case of typhoid fever.

I prescribed three 1-2-grain tablets of echinacea in solution every hour, continued the intestinal antiseptic, and ordered an alcohol-bath. About 1 p. m. the nurse reported a temperature of 105° F. by rectum, and I ordered a sponge-bath of magnesium sulphate, two tablespoonfuls to one quart of water. I arrived with counsel at 3:50 p. m.

The patient's pupils were now widely dilated, pulse fast and thready (the nurse had given 1-60 grain of strychnine), temperature 105° F. We gave 1-50 grain of strychnine and 1-100 grain of glonoin hypodermically, and after a lapse of half an hour administered one granule of dosimetric trinity No. 1 every fifteen or twenty minutes for four doses, without, however, seeming to make an impression. Then the pulse began to flutter, respiration became irregular, when I left, at about 7 o'clock. The woman died two and a half hours later.

What Was the Matter?

Now, brother doctors, I want to know what more we could have done, and what was done that should not have been done. Why was this woman apparently doing so well Thursday? Why was the sudden change in temperature? There was no sepsis, of that I am sure, no convulsion after 10 p. m. Tuesday, the only one after

delivery. Was death caused by thrombus in the vessels of the brain? I am inclined to think it was. I want the opinion of readers of CLINICAL MEDICINE, and your own, Mr. Editor.

[It is always difficult for an "outsider" to criticize intelligently a line of treatment instituted by experienced clinicians familiar with the symptoms presented in the patient. Grossly incorrect procedures or insufficient medication can, of course, be easily recognized and justly criticized, but in a case of eclampsia treated scientifically (as was this one) we can only conjecture whether certain steps *might* have produced better results.

It would be difficult indeed to find fault with Dr. Baldwin's management. We should perhaps have pushed pilocarpine and given physiologic salt solution by hypodermoclysis while the patient was in the hot-pack. The veratrine injections might have been more numerous, and had the toxins present in the blood been more thoroughly eliminated and those remaining well diluted there possibly would have been no serious (post-partum) symptoms of toxemia. The use of the hyoscine-morphine here, we are rather inclined to think, hardly was well advised.

The urine drawn by catheter should have been examined, and the bowel flushed well with a copious enema of decinormal salt solution administered as soon as the bladder was emptied. Then the pilocarpine, elaterin, and laxative saline (with the patient in the pack) would perhaps have resulted in the elimination of toxins and reestablishment of a better condition of the body-chemistry.

From the moment of delivery the secretions should be examined and elimination forced, systemic antiseptics (nuclein, etc.) being pushed hard meanwhile. In eclampsia elimination of the poisons generated in the system is the main indication, even the control of the convulsions being a secondary consideration. We *can* control the seizures by the prompt and positive use of veratrine and chloroform, and then prevent their re-

turn by getting rid at once of the causative poisons.

The uterus once emptied, the one great necessity is continued stimulation of renal, hepatic and dermal activity. Shock (post-partum) will call for the use of stimulants, and strychnine is not objectionable; digitalin (or caffeine) and small quantities of pilocarpine should, however, be administered at the same time. High enemata, the laxative saline, the hot-pack, and the free use of hepatic stimulants, diuretics, and nuclein, we are inclined to think, would have prevented the unfortunate termination reported.

Still (however all this may be), one important lesson may be learned from Dr. Baldwin's case. The best way to prevent deaths from eclampsia is to prevent the occurrence of this disorder. The woman should have been told, when first seen, that she *must* present herself for examination (bringing specimen of her urine) at least once a month after the fourth month. If suspicious conditions obtain, weekly tests of the urine are not too many. Had the systemic toxemia been recognized earlier, effective remedial measures could have been instituted and mother and child would probably both be living today. When the doctor has done his part and insisted upon such periodical reports the woman's welfare rests in her own hands, and should she fail to carry out instructions and suffer thereby no blame can possibly attach to her physician.

Should proper warning not have been given, however, the position is entirely reversed and the doctor must perforce realize that he has failed to perform his full duty to his patient.

We cannot, of course, offer a definite opinion as to the existence of a thrombus, but the symptoms described would lead us to believe that this woman succumbed to a profound toxemia developing to a very great extent (and suddenly, as such conditions may) on Thursday and Friday. Discussion of this interesting case by our readers is invited. Remember that our journal is an open forum.—ED.]

Vesical Calculus in Siam

With a Discussion of Its Treatment

By CHARLES H. CROOKS, M. D., Lakawn Lampang, Laos, Siam

EDITORIAL NOTE.—*In the Orient vesical calculus is very common, and especially so in Siam, Burma, India and South China. According to Dr. Crooks one percent of the people of the province in which he lives have been operated upon for "stone" within the last twelve years, and probably not a third of the afflicted have been reached. The Doctor, therefore, has had a wonderfully rich clinical experience which is made the basis for this article.*

VESICAL calculus is so rare in the Western Hemisphere that the surgical authorities devote little space to it and the general practician seldom, if ever, meets with it. In my own case I never even heard reference made to it in lectures, and when upon inquiry from a layman as to what line it would be well for me to brush up on for practice in the Far East, he replied, "Stone," which I took to mean gallstone. Consequently I arrived in Farther India without experience or even cursory study of the disease. Upon the suggestion of the Editor for an article on one of the prevailing diseases, I choose this one; but will endeavor to make it more of a "history sheet" than a didactic treatment of the subject.

Calculus Prevalent in Asia

The distribution of vesical calculus seems to be quite general over Asia, being very common in India, Burma, Siam, and is frequently reported as far north as Manchuria. In this particular region it seems to appear in districts, but this no doubt is due, in part at least, to the fears and superstitions of the inhabitants; for it requires many years to break down fear of all things western, and above all, the "cutting" of the body.

The records of the hospital at this place show that more than one percent of the total population of the province have been operated upon for stone within the last twelve years. I feel quite safe in estimating that we do not reach one-third of those afflicted. Such being the case, it would be impossible for one to shout in the midst

of a native village without at least one sufferer to reside within the radius of his voice. There would of course be exceptions, but I feel quite sure that the estimate is not too high.

As to sex, the records show that females seldom ever call for treatment, probably not to exceed three percent of all cases being females. In age the range is from very early infancy to extreme old age. Children under 18 months are not usually operated upon, but when stones of one-fourth ounce weight are removed at that age, the disease must set in very early in life. The location may be placed at the meatus urinarius and kidney, and at all intermediate points. The bladder is, of course, the most frequent point, but stones are quite often found in the spongy urethra.

The symptoms are true to those set forth by the authorities and are generally recognized by the people. In fact they are so differentiated that we never examine a child before the anesthetic is administered and all preparation made for operating, and we practically never find that we have "cleaned up" for naught. In adults an examination is usually made after the subjective symptoms are recorded, more for aid in determining the method of procedure than for discovery of the stone.

Conjecture As to Causes of the Malady

The causes of this malady are still more or less conjecture. Diet, i. e. rice, is one of the probable causes listed by most authorities, and there seems to be considerable evidence in favor of this argument, since rice is the main diet, "the staff of life" of

all the region where the disease prevails. In this particular region the rice is the glutinous variety, which is much heavier in starch than the rice known to the Western Hemisphere. The rice very often is poorly cooked, which does not add to its efficiency as an article of diet. The fact of the appearance of the disease in early infancy would seem to argue against the rice-diet theory. Although children are fed rice when they are only a very few days old, it could not truthfully be said to be their regular diet. They subsist upon the diet which nature has provided for the offspring of all mammals.

Water also is given as one of the possible causes, which would seem to account for the appearance of the disease in districts. The appearance of the disease in early infancy cannot argue against this theory so much, since children are given cold water daily from birth. Most of the specimens of concretions extracted are calcic or phosphatic in composition, hence these sediments are in excess in the excretions of the urinary organs.

The habits and environment of the people tend to frequent and rapid internal congestions. In the cold rainy season they do the hardest work of the entire year with practically no body protection. Then, too, when a perspiration is raised, there is no clothing to moderate the cooling process, hence quick and severe internal congestion must follow. The people may truthfully be said to be cold all the time. In the coldest weather, when the foreigner wears his overcoat and heavy suit, the native uses but a single blanket for covering at night. From birth to their sixth or eighth year the children wear the clothing of our first parents before "they knew that they were naked." From then to the end of earthly existence the masculine attire is a loin cloth, and that of the female is a skirt extending from the waist to the ankles. Of course the trunk is covered when "dressed up," but the routine is as above.

Food and water no doubt are contributory causes in more or less degree, but the customs and environment which produce almost

constant internal congestion, thus increasing the precipitation of the elements of urinary debris and holding them in the congested organs until the nucleus of stones too large for passage even in the normal state of the organs are formed; these again acting as constant irritants, increasing the time and conditions suitable for the formation of the stone by aggregation, is certainly also a contributory, if not the principal cause of the malady.

Methods of Treatment in Vogue

The various methods of treatment are set forth by the surgical authorities, the only effective and permanent means of relief being the surgical one, although the native usually requests medicine which will "melt" the stone. The use of any method which might offer temporary cessation of the symptoms would prove very poor practice, for should you give temporary relief to some patient, all the others would refuse to be operated upon but demand the medicine, thus causing endless and avoidable suffering. So methods other than surgical are not used except in extreme cases where the indications point to certain untoward results from surgical procedure.

The crushing operation is used by some operators, but seems to be meeting with increasing disfavor. Personally I never use it except in very extreme cases of age and disease which make the cutting operation particularly hazardous, and where the temporary relief which may be secured seems worth the while. This more, perhaps, because I have never used the method and thus lack in the manual skill necessary successfully to accomplish the operation; but I do not believe that all the fragments can be washed out through the tube, at least one can never be certain that they have been. This method is least often used of the three surgical procedures.

For stones lodged in the urethra some advocate their removal via the meatus urinarius, which in some cases is quite practicable, especially where the stone is near or quite in the opening. But in many cases where the stone has even passed the spongy por-

tion the rough projections injure the tract over the whole distance which it is necessary to move them. Where the stone has lodged in the spongy portion, it is nearly always too large to pass out and its forcible passage through the remaining length of the tract does far more damage than a clean incision at the point of lodgment. Where lodgment has taken place deep down in the spongy portion, it is not safe to incise the scrotum, but the incision may be made just in front and the spongy portion entered from the distal end. Quite frequently a pocket has been formed and the stone become attached, from which position it is quite difficult to remove it with the small instrument which must be used, usually a long-jawed artery forcep. In this location the stone is often very hard and smooth, rendering crushing difficult and also grip sufficient to effect its dislodgment. Sometimes a portion of the scrotal tissues sloughs out from the severe instrumentation.

In males over 18 years of age the perineal route is the one usually chosen, and by some operators even as early as 11 or 12 years, except in cases where extremely large stone, other disease or deformity prevent. The left (right side of patient) is the side most often selected, and for which most of the sounds are made, although there is no particular reason why the right side should not be chosen except that the actual accomplishment is not quite so easy from a question of technic.

The suprapubic is the method from necessity in males under 10 years of age, and by many operators it is the method chosen up to 15 or 18 years. It is necessary to use this method at all ages in some cases and is successfully accomplished even up to 75 years. This method is usually not chosen above 20 years except where the stone is large and too hard to crush or where disease or abnormalities of other organs interfere as prostatic disease. The operator is sometimes compelled to resort to this method after an attempt has been made to crush or to remove by the perineal route.

In females the method most practicable is the urethral, and an attempt is always

made to remove by that route. Sufficient stretching can be done to allow the passage of the index-finger and instruments and even of quite good-sized uncrushed stones. Crushing of the larger specimens will, of course, facilitate their removal, and irrigation may be used to much better advantage than in the male, since exploration for remaining fragments can be done.

The technic of the crushing operation is explained in the better surgical works, usually in full detail. Cocaine anesthesia does not produce the best results. Relaxation is never complete and the patient is never sufficiently at ease to prevent his interfering more or less with the safe and speedy accomplishment of the operation. There is always more chance for accident from broken instruments, etc., when the patient is conscious and subject to pain. The method of anesthesia is not without its decided dangers and untoward results.

Technic of the Perineal Operation

For the perineal method, after the ordinary antiseptic precautions in the intestine and those of the external body, the patient is placed upon the back and the bladder washed four or five times with a hot boric-acid solution for the purpose of rendering that organ aseptic from retained urine and also for the purpose of relaxation. The last application of the fluid is retained for the purpose of floating the stone to the neck, facilitating the passage of the sound, holding back the venous supply, and for producing the "sign," the gush of fluid which informs the operator that the cavity has been reached.

A stirrup is applied and the limbs are attached to the standards; a grooved sound is passed into the bladder and is held by an assistant near the abdomen in the median line of the body for the first stage of the operation. The sound is first definitely located by manipulation through the perineal tissues, then the initial incision is made downward and outward from a point one to one and one-half inches in front of the anus just to the left of the raphe for a distance of two and one-half to three inches on

a line which passes two-thirds distant from the anus to the ischial tuberosity. After the skin incision is completed the sound is raised to a position nearly at right angles with the body and hooked firmly against the pubic bone; blunt dissection is done until the groove of the sound is exposed at the upper end of the initial incision. Into this groove the probe end of a lithotomy knife is introduced. With the lithotomy knife held in the line of the body the incision is carried through the deeper tissues into the bladder; with the knife carried down in this position the incision through the firm tissues is usually sufficient for the accomplishment of the work.

This stage of the work is the most critical, since considerable pressure must be used; should the knife slip out of the groove serious damage is likely to result to contiguous organs and vessels. With the knife held as described the resistance of the harder tissues helps to hold it in the groove.

At the "sign"—the gush of fluid from the incision—the right index-finger is forced into the cavity before the removal of the knife in order to retain the fluid for exploration; the condition of the stone and the bladder is ascertained, and the opening enlarged by the exploring finger. A gorget (large-grooved, probe-end sound) is introduced and the grooved sound removed. With the gorget acting as a retractor and a director for the extracting forceps, the removal is effected with whatever manipulation with finger, crushing instruments, etc., the particular case demands.

It is often desirable to use extensive irrigation before the removal is attempted, for the purpose of relaxation, stauching of hemorrhage and floating of the stone. Large stones are crushed if possible, and attached stones may, in many cases, be dissected loose with the finger or curved blunt dissector. In most cases it is necessary to loosen it by traction, in which case gentle and prolonged manipulation gives better results than severe instrumentation, particularly in the smaller amount of hemorrhage which results.

The shape, size and location of the stone are the guiding factors for the operator, and the facility and dispatch with which he can meet these conditions determines the final results which he will attain. Prolonged irrigation is always desirable to relieve the congestion from instrumentation, stauching of hemorrhage and washing out the fragments. Exploration for multiple calculi and for ascertaining the resulting condition of the bladder-walls must not be forgotten.

A piece of ordinary drainage tubing, well perforated at the end, is inserted well into the bladder and fastened to the skin-flaps at the upper point of the wound with a single catgut. The incision is gently packed with iodoform gauze and dressed with warm boric-acid irrigations and iodoform gauze daily. The patient can usually get on his feet at from the third to the fifth day and shows quicker recovery than when confined to the couch for a longer period.

The dangers attendant on the operation are cutting of the rectum, severing of contiguous vessels, damage to nearby organs, and hemorrhage from attached stone: all of which must be dealt with promptly and upon the merits of each particular case. The hemorrhage from attached stone often is severe, but hot irrigations and gauze packing usually serve to allay. However, hypodermoclysis is sometimes necessary.

The Suprapubic Procedure

The suprapubic operation is the method most frequently used of necessity in children under 12 years of age; also in adults where the stone is very large and hard, where diseased conditions and abnormalities of other organs prevent lower operation; and also is resorted to when attempt at one of the other methods fails. This operation is the least difficult to perform, in fact one of the older men out here has made the assertion that he could do the operation in the dark. While most of us do not feel so sure of our skill, the method is the simplest of the three and fraught with the least danger.

As a precautionary measure the calomel-santonin treatment should be used, for intestinal parasites (*ascaris lumbricoides*) are

nearly always present. They have often caused death a short time after the operation, possibly from the effect of the anesthetic rendering the worms inactive and favoring the formation of an obstructing mass. Aside from this precautionary measure the cleansing of the intestinal tract is essential, as also the removal of the parasites.

After the preliminary external anti-septic measures the patient is placed on the back with the inflated rim of the Kelley pad under his back. A few layers of a blanket or a thin pillow are usually essential under the rim of the pad to render the abdominal walls sufficiently taut for the quickest work in dissecting and also for drawing the peritoneal reflection over the bladder and the omentum out of the field of operation. The bladder is flushed several times with hot boric-acid irrigations for the purpose of rendering it clear of urine, relaxing the parts, floating the stone, etc. The last application of the fluid is retained for the purpose of separating the walls of the organ, holding back the venous supply, floating the stone and furnishing the "sign"—the gush of fluid—which informs the operator that the cavity has been reached. The fluid also aids in pushing up the peritoneal projection and the omentum from the field of operation.

The flushing catheter is removed and a blunt, short-curved sound is inserted, pushed well up against the anterior wall, hooked against the pubic bone and held firmly by an assistant. After locating the point of the sound with the fingers through



Dr. Crooks's home in Siam

the abdominal walls, the initial incision is made in the median line from a point two-and one-half to three inches above the pubic symphysis, downward to the symphysis. If one works toward the symphysis there is less danger of accident to the peritoneum.

After the skin incision is completed, the opening through the deeper tissues may be accomplished by blunt dissection to the third layer of muscles. This layer being well differentiated, the point of the sound well pushed up and located, a long bite is taken on either side of the sound with a curved needle and large silk ligature, with the needle passing into the bladder, the two ends of the silks are cut to about six inches and caught up with a hemostatic forceps. These two silk ligatures, one on either side of the incision, are caught up with the left hand of the operator, the sound is removed, and the incision into the cavity is made between the silks. With the silks held tight, the anterior walls are prevented from collapsing and thus the fluid from escaping before the thorough exploration of the cavity and exact location and condition of the

stone are ascertained by the right index-finger.

After this the wound is enlarged to the required size and the extracting forceps introduced. The silks may now be dropped and both hands used in the extraction. The silks should not be removed until the operation is completed, for much time and patience may have to be expended in finding the opening into the bladder for the insertion of the drainage tube and packing if the silks are removed and also in reintroducing the extraction forceps, should they slip off or have to be changed.

Crushing of large stones of course prevents the necessity of very large incisions. Attached stones can be dissected loose with the finger or curved blunt dissector much more readily than in the lower operation, but in many cases it is necessary to tear them loose by traction, in which case slow and gentle manipulation gives more satisfactory results. The stone can usually be removed much quicker by this than the lower method because of readier access to the cavity; but time used in getting the long axis of the stone in line with the incision and in getting the size, shape and condition of the stone definitely in mind before beginning to remove, gives much better final results than a more rapid and haphazard operation.

After the stone is out, thorough examination for multiple calculi and to ascertain the condition of the parts must be instituted. The simple rubber drainage tubing with the end well perforated is inserted to the bottom of the cavity near the neck and attached to the skin edges at the upper end of the incision with a single catgut suture. Prolonged irrigation with hot boric-acid solution is instituted through the incision and also through the drainage tube, for the purpose of being sure that the same is open. The opening is lightly packed with iodoform gauze down into the bladder, and the silks are removed by traction on either one of the ends.

After-treatment consists in hot boric-acid irrigations and iodoform-gauze packing. The tube drops out from the fifth to seventh

day and the patient should be on his feet from the third to fifth day. The dangers attendant upon this method are perforation of the peritoneal cavity and excessive hemorrhage. Perforation seldom proves fatal, and unless the opening is very large, simple gauze packing is the only treatment instituted.

As an after-treatment for all methods of operation something to render the urine antacid is desirable. Boric acid and salol, each three times a day, answer very well; uritone acts nicely but is rather expensive. We use a tablet composed of the following: Boric acid, grs. 2; potass. bicarb., grs. 2; ext. buchu, gr. 1; ext. triticum, gr. 1; ext. cornsilk, gr. 1-2; ext. hydrangea, gr. 1-2; atropine sulph., gr. 1-500. The same acts very well as a cystitis remedy in inoperable cases.

A Few Case Records

The record of a few cases will give some idea of the results accomplished.

Case A.—Operated upon by Dr. C. Hansen. Male, buddhist priest, aged 77. Probably suffered from childhood. Suprapubic method. Stone weighed 34 ounces. For three days following the operation condition of patient was favorable. Sudden death resulted from heart failure.

Case B.—Operated on by Dr. C. W. Mason. Male, aged 65. Phimosis with pinpoint meatus. Slit open the prepuce and removed from under the prepuce three stones about the size of first joint of thumb. Total weight of the three stones about one ounce. Slight ulceration of glans. Patient returned home in less than a week.

Case C.—Operated on by Dr. C. W. Mason. Male, aged 19. Five years previously had a stone removed by the perineal method. The perineal incision formed into a fistula from which several stones were discharged and from which a stone one-half by two inches was removed at time of second operation. Soon after the second operation severe pain set in in the region of the right kidney, at which point a nephritic abscess opened spontaneously and discharged a stone about the size of a tamarind seed.

(date seed). At the last obtainable history of the case both the perineal fistula and the nephritic abscess were discharging, though not much.

The foregoing are of course extraordinary and cited more for record than for practical interest. The following are selected at random from our hospital record and give a fair idea of the general run of cases and results accomplished.

Case 1.—Male, aged 47. General condition good; had suffered several years. Suprapubic operation. Stone weighed 6 drams; oval shape; mulberry variety (calcium oxalate). Incision closed in twenty-one days. Course of recovery normal.

Case 2.—Male, aged 10. General condition good; history of pain for past three or four months. Stone weighing 7 grains, very hard and smooth (uric acid), was removed from spongy urethra through incision at front of scrotum. Wound packed with iodoform gauze only as dressing. Patient was on his feet the third day. On the twelfth day a small fragment of the stone which broke off at the attachment sloughed out through the incision. Course of recovery painless and normal.

Case 3.—Male, aged 18 months. General condition good, with history of pain for the past three or four months. Suprapubic operation. Removed phosphatic stone weighing 33 grains. Course of recovery uneventful. Went home on the eleventh day.

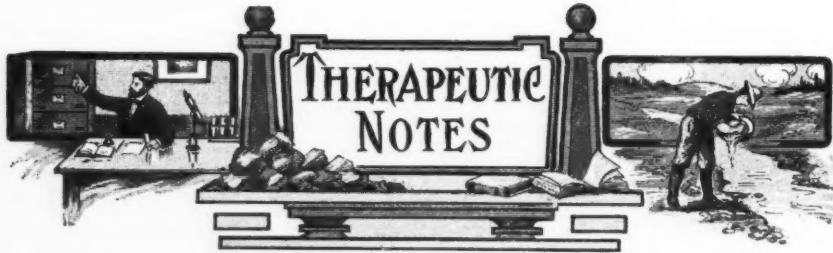
Case 4.—Male, aged 17. General condition good. Suprapubic operation. Phosphatic stone weighing 1019 grains was removed. Course of recovery normal. Went home on the sixteenth day.

Case 8.—Male, aged 60. General condition of patient fair. History of the disease indefinite as to time. Lower operation, by which a fair-sized phosphatic stone was removed. Severe hemorrhage resulted from puncturing a vessel in fastening the drainage tube, and hypodermoclysis had to be instituted. Course of recovery uneventful. Went home the eighteenth day.

For high percentage of recovery, for the relief of most acute suffering, no branch of surgery gives better satisfaction. The record of my predecessor in this hospital shows one death in 300 operations on children. A loss of 15 percent for all classes of cases in all the hospitals of this country is a high estimate.

NO lie can hurt a man for a long time. There is little use in spending your time trying to correct lies. The lie itself will drop like a feeble shaft against the armor of truth.

The thing for us to do is so to live and so act the truth that a lie will not obtain. Lies do not hurt, it is the truth that hurts, and it behooves us to see that there are no weak spots in our lives where our names may be attacked truthfully.—William C. Hunter.



UNCOMPLICATED PUEPERIUM IN MEXICAN WOMEN

Dr. Theodore F. Benndorf of Hicotencatl, Mexico (*Ellingwood's Therapeutist*, April, 1910), describes graphically the dirty, unhygienic surroundings in which Mexican women of the lower classes, attended by dirty and ignorant midwives, pass through their confinements, and from which they rise forty-eight hours later, resuming their heavy work in from two to five days. He adds that "they live on very simple diet and like the children of nature, which they are, they are sound and healthy."

The doctor is justly surprised at the easy labor in these women, who belong to a class on a comparatively low level of civilization, and at their freedom from septic infection, which is only too frequent an occurrence under much better, or perhaps, rather, under less bad, hygienic conditions in this civilized United States of ours.

The present writer believes that these people are immune against the injurious action of septic microorganisms by virtue, partly of an inherited, partly of an acquired immunity. This has been well explained by Effertz (*Wiener Klin. Wochenschr.* for 1904), who practised for years among the Central American Indians.

Effertz explained that for centuries the Indians had gone barefoot and had been exposed to manifold wounds on legs and feet in walking through the grass, through the woods and brush. The wounds naturally became infected and festered, and Effertz has often seen children whose legs presented large suppurating surfaces. With

the healing of these wounds an immunity to new infection was acquired, at first slight but gradually increasing, so that in adults scratches and other wounds always heal kindly in spite of being neglected.

Since it has been shown experimentally (in our country first by Rosenau and Anderson of the U. S. Public Health and Marine Hospital Service) that a specific immunity may be transmitted, at least to a certain degree, from mother to offspring, we may conclude that this has occurred among the Mexicans and the Central American Indians; and reasoning by analogy, we may accept the same explanation for the freedom of Mexican women from puerperal septicemia.

HYOSCINE, MORPHINE AND CACTIN IN PUERPERAL ECLAMPSIA

Dr. J. E. Moses of Kansas City, Mo. (*Texas Courier Record of Medicine*, March, 1910), was called to attend a woman in confinement who, on three previous occasions, had passed through severe attacks of eclampsia, which commenced before delivery and continued through labor. By appropriate preliminary treatment, aided by the administration of hyoscine, morphine and cactin, together with a small quantity of chloroform, labor progressed and was terminated favorably. However, three hours after delivery a puerperal attack occurred. The doctor administered full doses of the hyoscine, morphine and cactin compound and about a dram of chloroform, by the drop-method, after which the patient became quiet. The urine, which was at first drawn by catheter, was voided spontaneously.

when the patient awoke, and complete recovery took place.

NUCLEIN STIMULATES CELL ACTIVITY AND PHAGOCYTOSIS

Dr. R. J. Smith of Calliston, Utah (*Wisconsin Medical Recorder*, March, 1910), has the following to say in regard to nuclein: "I have used nuclein in many conditions and found it of decided value. Its demonstrable action is to increase leukocytosis, and it invariably does so in greater or less amount according to the disease from which the patient suffers. By increasing leukocytosis we increase phagocytic action. Cell action and cell repair may become so hindered by the presence of morbid products—*toxins*—that the recuperative power of the organism is completely abolished. Here nuclein stimulates cell activity and phagocytosis, and normal repair occurs. It is unnecessary to state here the numerous instances where nuclein has been of advantage in the treatment of disease. The point is this: nuclein may be necessary in a given case to turn the scale toward health when the body processes do not manufacture it in sufficient quantities, and it is then of inestimable value."

PATHOLOGY AND THERAPY OF GOUT

S. A. Arany (*Zeitschr. f. Physiol. u. Diaet. Ther.*, Vol. 13; through *Wien. Klin. Wochenschr.*, 1910, No. 11) has published the results of his investigations on gout, which still is a puzzling problem for pathologists and therapists alike. He assumes a toxin as the cause of the disease, which may be either of exogenous (alimentary) or of endogenous origin.

In exogenous gout the diet alone is therapeutically of importance. Since animal food, and especially food containing much nuclein, increases the formation of uric acid, it must be limited, while carbohydrates are to be recommended. Alcohol is distinctly harmful for gouty persons, and coffee also seems to exert an unfavorable effect on them, while tea is permissible; but the copious in-

gestion of milk is especially to be recommended, while fat, cheese and butter may be taken in moderation.

In acute attacks of gout potassium iodide can hardly be omitted, and the salicylates are also of use. These remedies are best given in alternation. Alkaline mineral waters are useful in gout, although their mode of action has so far not been satisfactorily explained.

TREATMENT OF FACIAL NEURALGIA

V. Alexander (*Berl. Klin. Wochenschr.*, 1909, No. 50) advises the following plan of treatment in facial neuralgia: In recent attacks active cathartics are given, diaphoresis is induced, and salicylates are administered, the patient being kept in bed and on restricted diet. If improvement does not follow in the course of a few days, the sweating process is repeated, and local heat is applied, as also, possibly, galvanization with the anode. If after six or eight days there is no improvement, aconitine is prescribed, in doses of 1-5 milligram (1-335 grain), together with a moderate dose of a laxative remedy. [It appears to us that the aconitine should properly be given from the start.—ED.] If this is ineffectual, arsenical treatment is indicated, together with injections after Schleich or Lange, or injections of eucaine solution. In case of persistent failure the affected branch of the trigeminus must be destroyed by injections of 80-percent alcohol.

BURNS TREATED WITH TINCTURE OF IODINE

Descomps (*La Presse Medicale*, Nov. 6, 1909; through *Therapeutic Gazette*, Mar., 1910) has been using tincture of iodine as an antiseptic application in burns, with the happiest results. He begins by painting the skin around the burned area with the liquid, using a cotton pedge sufficiently small to follow the irregularities of the edge of the burn accurately. He then paints the surface of the burn with the same, touching a small area at a time. If any

part of the burn is too tender to bear the application of the full-strength tincture, he uses the compound liquor of iodine, sufficiently diluted so as not to be painful. Pain is to be avoided, as it increases the tendency to shock.

After the application is finished, a dry aseptic dressing is invariably applied. At subsequent dressings it is wise to paint the surrounding skin with the tincture of iodine from time to time, but the surface of the burn should not be touched unless there is a tendency to the formation of pus under the crusts, in which case the suppurating spots are touched again.

ALKALINE REMEDIES IN STENOCARDIAC ATTACKS

Von Chlapowski (*Muench. Med. Wochenschr.*, 1910, No. 10) recommends, in the so-called dyspeptic forms of angina pectoris, a severely limited diet, and magnesium peroxide (7 1-2 grains) after meals. Carbonic-acid baths in such patients stimulate the appetite, but thereby induce an overloading of the stomach and, therefore, lead to new mischief.

MASSAGE AS AN OCCUPATION FOR THE BLIND

Dr. L. Webster Fox (*Ophthalmology* for January, 1910) discusses the problem of training blind persons as professional masseurs. Massage seems to be an ideal occupation for the blind, and has been practised by these unfortunate in Japan for more than a thousand years. Professor Yoshimoto, principal of the Model College for the Blind in Tokio, reports that in that country the majority of masseurs are blind and that almost all the blind are masseurs. They are carefully trained in anatomy, physiology, pathology, and then in massage and in the ailments in which it is applicable.

The National Institution for Massage for the Blind, in London, has now more than sixty blind trained operators, graduates of the institution. In other European cities

also the work has been taken up by the blind, with the encouragement and support of the highest medical authorities. In New York and in Philadelphia attempts have been made in the same direction, but although the results have been satisfactory, the movement has not as yet been very successful.

PHOSPHORIZED CODLIVER OIL IN RACHITIS

J. A. Schabad (*Zeitschr. f. Klin. Med.*, 1910, No. 5) says that phosphorus dissolved in codliver oil favors increased retention of lime in rachitis, while this substance alone does not show such an influence. Sesame oil, which is often recommended as a substitute for codliver oil, does not exert any saving action on the loss of lime salts.

Codliver oil, according to these investigations, still occupies an important position among the remedies at our command for the treatment of rickets, and its favorable action is increased by the addition of phosphorus. We hold that the latter drug is best administered in the form of nuclein, which contains approximately ten percent of phosphorus. Ramacci (*La Clinica Medica Italiana*, 1909, No. 9) has found paranucleinate of iron to be particularly indicated in anemias and in rickets, in which it improves the condition rapidly and leads to a surprising gain in weight.

QUININE OINTMENT IN WHOOPING COUGH

Dr. L. Berliner (*Muench. Med. Woch.*, 1910, Feb. 15), for two years has employed quinine ointment in every case of whooping-cough which he was called upon to treat. He prescribes from 15 to 45 grains in from 2 1-2 to 3 drams of lard, according to the age of the patient. The ointment is applied three or four times daily to the nares by means of a glass rod, a piece about as large as a pea into each nostril, and in order to assure that the ointment reaches the posterior portions of the nares the child is placed on its back.

The success of this remedy became manifest rapidly at times, at other times more slowly. In several cases he was assured by the mothers of his patients that an emphatic improvement was noticeable after three or four days; in most cases, however, the author believes to have noticed that after about one week the number of attacks and their intensity diminished decidedly. Relapses occur, but yield to the same treatment. The method is the more effective the younger the child.

CONTRAINDICATIONS FOR THE USE OF THIOSINAMIN

S. Stocker (*Korrespond. Blatt f. Schweiz. Aerzte*, Vol. 39, No. 24; through *Muench. Med. Wochenschr.*, 1910, No. 11) says that fibrolysin [thiosinamin] should only then be employed when the history reveals no severe infectious attacks which heal by connective-tissue reaction. He was led to this conclusion by untoward results, as for instance in a case in which a vaccination scar and an old bony thickening showed a high sensitiveness following two doses of 2.3 Cc. (37 minimi) each of this medicament.

ADONIDIN AND THYROID GLAND

Dr. Heinrich Stern recommends the addition of a cardiac tonic to thyroid gland whenever the latter medicament is to be used for any length of time. His decided preference is for adonidin. He recommends the following formula, for one compressed tablet or capsule:

Sodium cacodylate.....	gr. 1-200
Adonidin	gr. 1-30
Thyroid gland (powder).gr.	1

Fresh adonidin cannot always be obtained, its price being exceedingly high, but in its absence caffeine may be substituted in doses of 1-6 grain.—(*Medical Review of Reviews*, Feb., 1910.)

GASTRIC LAVAGE IN VOMITING

J. Snowman (*The Lancet*, London, Mar. 12, 1910) says that "the washing out of the

stomach with weak boric-acid or an alkaline solution is an excellent method of treating the persistent vomiting in gastric dilation or the gastric catarrh of infants."

OIL OF SESAME FOR DIABETES

Prof. Arloing recommends the following emulsion of oil of sesame for the treatment of diabetes (*Bull. Gen. d. Ther.*, 1910):

Oil of sesame.....	Gm. 600
Water	Gm. 300
Solution of sodium hy-	
drate (sp. gr. 1.33)	Cc. 6

From four to six soupspoonfuls are to be taken during the day.

LOW ARTERIAL PRESSURE

Louis F. Bishop (*Archives of Diagnosis*) contributes several important studies of vascular pressure. Low pressure may occur with arteriosclerosis in neurasthenics. Neurasthenia has been termed pathologic fatigue, and one effect of this is seen in relaxation of the muscular coat of the arteries.

The best treatment for those who have developed high tension through nervous and chemical causes he finds to be fatigue by exercise.

Low pressure is found in arteriosclerosis when the causes of the latter have ceased to act. High tension is the result of a need, and if this is removed the tension relaxes, but the damage remains.

Low tension occurs late, when compensation ceases and degeneration ensues. We see the utility of high tension with persons who have lesions of some vascular area, requiring the extra force to maintain the circulation. Let the tension relax and at once trouble is evident.

These studies carry us back to the primary causes of increased tension. High tension is not synonymous with increased blood pressure. (*New York State Journal of Medicine*.)

Hemorrhage raises the former as it lowers the latter. The tension of cerebral compression is due to the demand for blood in the compressed brain. The pressure may

not fall when the need has passed but continue from habit. This is the nearest we ever come to an idiopathic hyperactivity of the pressure-maintaining mechanism.

Dr. Bishop does not believe contraction of the vessels is due to the direct irritation of toxins in the blood. There may be some impress on the local nervous mechanism. High tension may result from a need, as when oxygen is withheld.

Before attempting treatment, the blood, kidneys, metabolism and nervous state must be investigated, including the mentality. The symptoms are met by their antagonistic drugs. The diet, exercise and environment must be selected, and time given to secure the desired effects. The success of such management, he asserts, will prove a revelation to any physician who has been relying on vasodilators alone. "Most assuredly," we add, "and especially if, as is likely, his idea of 'vasodilators' is limited to the nitrites."

THE CARBOLIC-ACID TREATMENT OF BONE-AND JOINT-TUBERCULOSIS

Max Strauss (*Klin.-Therap. Wochenschr.*, 1910; through *Wien. Klin. Wochenschr.*, 1910, No. 10) has seen excellent results from local applications of pure carbolic acid in tuberculosis of bones and joints. The diseased tissue is carefully removed as far as possible. Then concentrated carbolic acid is applied and permitted to remain for one or one and one-half minutes, the healthy tissue being suitably protected. The phenol is then removed with pledgets of absorbent cotton and washed off with concentrated alcohol. The author claims that there is no danger of toxic effects from the carbolic acid.

DIABETES INSIPIDUS CURED

Einar Rohde (*Hygieia*, 1909, p. 1178; through *Wien. Klin. Wochenschr.*, 1910, No. 11) reports a case of diabetes insipidus which yielded to massive hypodermic injections of strychnine. A brewer, 39 years old, had suffered a fracture of the base of

the skull and shortly afterward a severe abdominal injury which was followed by diabetes insipidus. Recovery took place after treatment had continued for about one year, up to 8 milligrams (1-8 grain) of strychnine being injected daily. Between the separate injections several days were permitted to elapse.

CONCERNING INTESTINAL ANTI-SEPTICS

Dr. C. Kendrick of Kendrick, Miss. (*The Medical World*, April, 1910) says: "It is a matter of no consequence whether you call the remedies which are supposed to act as antiseptics (i. e., internally) 'intestinal antiseptics' or not. If they act well and do the work, and we think it is by acting as an antiseptic, while someone else thinks it has no such action, what is to be gained by discussing how a thing acts? The so-called 'intestinal antiseptics' act well in my hands, and I shall continue to use them in such cases as I think need them. It is a matter of no consequence what a little squad of men in some great university say."

THE URINE IN SKIN DISEASES

Polano (Doctorate Dissertation, Leyden, 1909, through *Wien. Med. Woch.* for Jan. 29, 1910) has made careful urinary examinations in two hundred patients, determining the 24-hour amount, the specific gravity, total acidity, amount of chlorides, phosphates, indican and nitrogen. The author has found that in cutaneous pruritus the urine is greatly diluted and poor in phosphorus, which fact explains the good effects from the administration of phosphoric acid in that affection. In psoriasis and chronic eczema he finds oliguria, increased specific gravity, hyperacidity, hyperchloruria, and an increased nitrogen coefficient. In these cases he finds a vegetable diet indicated. In acne punctata, rosacea and urticaria Polano has found an increased elimination of indican in 50 percent of cases; but this was absent in Hebra's prurigo. Albuminuria was present in only 2 percent of the cases.



Treatment of Cholera Nostras and of Cholera-form Affections with Veratrine

IN the *Zeitschrift fuer Aerztliche Fortbildung* (1909, p. 713), Dr. G. Maetzke makes a communication which will be summed up in the following:

Every year the physician finds himself in the presence of severe diarrheas which no doubt are of an infectious nature. Frequently, too, the cases do not differ from Asiatic cholera except by the absence of the comma bacillus, yet their gravity at times is very great, the prognosis very gloomy, while the deaths are not very rare. The usual treatment consists in combating collapse, cleaning out the bowel with castor oil or calomel, then calming the intestine with an opiate and arresting the diarrhea with tannin, tannigen, or tannalbin. This treatment is rational, but it is slow. Moreover, while the opium produces a transient improvement, it paralyzes the intestine and favors fermentation in the gastrointestinal canal, hence the meteorism which follows, and then we have a worse state of things at the end of the treatment than at its beginning. The castor oil and the tannalbin are well enough, but they do not compare in value with the most excellent service rendered the author by veratrine.

The employment of veratrine in cholera nostras is not new. Dr. Schulz recommended it as long ago as in 1888, in his "Precise de Pharmacologie," but his recommendation does not seem to have met with any very great approval. The homeopaths alone employ veratrum album, or white

hellebore—which contains the active principle jervine—in acute gastroenteritis.

Veratrine acts very well in these conditions provided it is administered in very minute doses. In large doses this alkaloid produces vomiting and diarrhea, but in small doses its action is surprising.

The following is a summary of Dr. Maetzke's first case treated by him with this medicament: Female, 39 years old, seen for the first time in the evening, has suffered, since morning, with severe diarrhea and vomiting. The alvine dejections became more and more frequent and looked like rice water; strength failing rapidly. Cramps made their appearance in the calves of the legs. There was cold perspiration, the temperature fell below normal, collapse threatened, and everybody was in despair. The clinical picture of this case suggests Asiatic cholera.

The case being urgent, Dr. Maetzke prescribed as follows: Veratrine, 5 milligrams (gr. 5-67), to be dissolved in 25 Grams (drs. 4 1-2) of diluted alcohol, and then diluted with 200 Grams (ozs. 6 1-2) of distilled water. Dose: One tablespoonful the first four times at half-hour intervals; after that every two hours. At the end of one hour the diarrhea was arrested and so also was the vomiting. The patient was able to take and retain a little tea. Next morning the temperature was normal and the pulse good. Two days later the patient left bed. The fifth day the stools were normal.

This astonishing success induced Dr. Maetzke to employ veratrine in all cases of acute gastroenteritis, and it never disappointed him. In one case of hyperthermia, accompanied by vomiting and diarrhea, veratrine did fail, it is true, but the case afterward proved to have been one of ulcerated enteritis, in other words, typhoid fever. In children above ten years of age small doses of veratrine also had an excellent effect. In very young infants he did not use veratrine except in one special, urgent case.

It is difficult to say what the mode of action of veratrine is. It does not produce alvine evacuations when given in the doses indicated above, but, on the contrary, it stops them at once. Besides, the doses employed are too small to act as does calomel. The presence of alcohol in the mixture described above serves to dissolve the veratrine and at the same time acts as a stimulant.

Does veratrine exert a special action in Asiatic cholera? This experience alone can determine. Inasmuch as serotherapy has not given satisfactory results in cholera, nothing should prevent us from trying veratrine whenever occasion presents itself.

A few remarks may be in order. Five milligrams of veratrine dissolved in 225 Grams of liquid will make ten large tablespoonfuls, each dose containing 1-2 milligram of the alkaloid, exactly the quantity contained in the dosimetric granule of veratrine; the latter therefore are available in treating choleric affections. For my part I should, in such a case, alternate the veratrine with strychnine and small but frequent doses of stenol, administered in water or in very hot grog. [Stenol is a proprietary pulverulent mixture of caffeine and theobromine.] If the vomiting should be violent, then strychnine and caffeine should be dissolved in one to two hundred Grams (3 to 6 ounces) of physiologic salt solution and injected subcutaneously. The latter measure can always be used and is the one most efficacious.

The action of veratrine in urticaria, in eczema and in herpes zoster might in a way explain its action in diarrhea. In modifying

the turgescence of the affected tissues the medicament may shut the door upon them. The toxins open that door, veratrine shuts it, so that then the infection has no effect because the ground is no longer favorable for it. But be this as it may, I shall try it and then give my experience.—DR. ROBERT TISSOT, in *La Dosimetrie*, January, 1910.

ALOIN A NEW COLOR REAGENT FOR ALKALOIDS

John Lothian has observed that a solution of aloin in diluted alcohol gives, with alkaloids, a cherry-red color, ranging to purple-red. The intensity of the color is in proportion to the basicity of the alkaloid tested. It is strongest with strychnine and weakest to zero with caffeine. With acids the red color passes into orange and with alkalies into green.—*Pharm. Journ.*, 1909, p. 428, through *Apothekerzeitung*, 1909, p. 361.

APPLICATION OF IRON CHLORIDE IN INGROWN NAIL

Ferric chloride solution is recommended by Lehmann (*Gazz. deg. Osped.*, 1910, p. 71) in the treatment of ingrowing nail. Cotton pledges impregnated with the preparation are pressed, with a little wooden stick, under the fold of skin and under the edge of the nail, and are redressed every twenty-four hours. Rest in bed for some days during this treatment is very desirable. Later on care must be had in properly trimming the toe-nail and wearing properly adapted footwear.—*Wien. Med. Wochenschr.*, 1910, No. 12.

DIFFERENTIATION OF STOMACH-ACHE

There are two forms of stomach-pain essentially distinct from each other. One is the solar-plexus pain, the other is the visceral.

The solar-plexus pain, according to M. G. Levensen, results from a hyperesthesia of the solar plexus. It is characterized by painful attacks, the intensity, duration and

recurrence of which are endlessly variable. It manifests itself in crises improperly called gastric. The seat of the pain is on the median line from the head of xiphoid cartilage down to the umbilicus, but predominantly at the pit of the stomach. These pains may come on spontaneously, or are provoked or aggravated by pressure. According to Levensen these attacks denote dyspepsia and nothing else.

The second variety of gastric pain is the visceral, and it announces the existence of some gastric lesion. It is always located somewhere in the stomach, and is felt in the abdominal wall more or less near to the Median line.—*La Clinique* and *La Dosimetrie*, March, 1910, p. 47.

BALSAM OF PERU AS A NASAL ANTISEPTIC

There would be no more precious therapeutic conquest than that which would enable us to preserve the nasal fossa of a healthy person during epidemics of grip, meningitis, etc., and to disinfect the same during measles, scarlatina, grip, and similar attacks. How many cases of otitis, of mastoiditis, sinusitis, laryngobronchitis, and even of bronchopneumonia might not be obviated if we had such a therapeutic aid! But the problem is a difficult one to solve.

Of all the combinations proposed for the disinfection of the nasal fossa Henri Bourgeois prefers the ointment of peruvian balsam prepared according to the following formula:

Balsam of Peru.Gm.	0.75 (grs. 12)
Lanolin	Gm. 5.0 (grs. 75)
Vaseline	Gm. 10.0 (grs. 5 $\frac{1}{2}$)

This is conveniently put into a collapsible nose-tube. If this is introduced into the nose at the first appearance of a cold in the head, when one feels the posterior nares inflamed, it will abort an attack of coryza. This ointment may also be utilized in simple chronic coryza, as well as in fetid atrophic rhinitis.

The following is the method of introducing the salve: The person lies down flat on the back, introduces the end of the tube into

one of the nares and presses the tube gently, rests a moment, then presses again, and so again till he feels the salve falling into the throat. Then he rises and spits out the excess of the salve, when frequently adherent rhinopharyngeal mucus will also come away. As a prophylactic this should be done in the morning and evening.—From *Progress Medical*, in *La Dosimetrie*, March, 1910.

RECENT METHODS IN THE TREATMENT OF PUERPERAL FEVER

Dr. Neumann gives the following abstract of an article by Dr. Ottfried Fellner, appearing in the *Berliner Klinik* (21 Jahrgang, 258 H.) on the above subject. The study of the literature on the subject as well as our own experience teach us that prophylaxis gives better results than any therapy. Obstetric interference should be had only where there are strong indications for it. In touching the uterus rubber gloves should be used, and immediately previous to this the vagina should be thoroughly washed out. Small placental remnants may be left for spontaneous expulsion, larger ones being removed with the fingers. Vaginoperineal tears must be carefully sutured. When there is a purulent focus it must be treated surgically. Ligature of the veins promises good results if the thrombi are palpable. In peritonitis opium and the ice-bag, etc., do good service. Serotherapy, friction with collargol (or intravenous injections) may be tried. Dr. Fellner thinks that a vaccine-therapy possesses the best prospects for success.—*Wiener Med. Wochenschr.*, 1910, No. 12.

TREATMENT OF CARDIAC WEAKNESS IN CERTAIN INFECTIOUS DISEASES

K. Andrejew writes as follows in the *Meditinskoe Obozrenie*, 1909, VII: Cardiac activity in subjects of typhus fever and abdominal typhus is low during the entire duration of the disease and even in the first weeks of convalescence. In abdominal typhus the heart's activity is weakest at

the end of the second and beginning of the third week, while in typhus fever the heart's weakness is greatest during the second week.

The best cardiac remedies are caffeine and digitalis. Medicaments that reduce the temperature cause a lowering of the blood pressure. Baths of 27° C. (80° F.) stimulate the heart. Determination of the blood pressure according to Riva-Rocci and the method of Katzenstein enable the physician to conserve in time the reserve powers of the heart.—*Wiener Med. Wochenschrift*, 1910, No. 12.

TOBACCO AND THE ETIOLOGY OF ARTERIOSCLEROSIS

Von Paul Schenk writes, in the *Deutsche Medizinische Zeitung* (1910, No. 4), as follows: It is not the drinking of alcohol but the abuse of tobacco that is the cause of arteriosclerosis, especially the sclerosis of the coronary arteries. And the dysbasia (difficult walking) angiosclerotica also can in most cases be traced to excessive smoking. Apart from this, the thickening of the blood from an insufficient supply of fluids in the presence of overabundant food is of importance.—*Wiener Med. Wochenschr.*, 1910, No. 12.

BERTILLON'S APPRECIATION OF DOSIMETRY

In a letter from Paris, dated March 22, 1880, written by the famous anthropologist, Bertillon, to Burggraeve, thanking him for a copy of the latter's "Histoire de L'Anatomie," in speaking of allopathy and homeopathy, he writes as follows:

"As for me, these appellations are absolutely misapplied. True medical science is neither allopathic nor homeopathic, neither spiritualistic nor even materialistic; all these are metaphysical conceptions. And allopathy did not even exist anywhere but in the troubled brains of those who named themselves homeopaths. True medicine is a scientific work which recognizes no other

methods except the scientific one; and it seems to me that dosimetry, at least so far as its pharmacopeia and its name are concerned, approaches very closely to this magnificent method.

"Be this as it may, I have the greatest admiration for men of energetic convictions who give their life to the propagation and final victory of that which they esteem true and just. It is for this reason that I beg you to accept my great esteem and sympathy as well as my best thanks."—*Reperatoire Universel de Medecine Dosimetrique*, 1880, p. 115.

INDICATIONS FOR TRANSFUSION AND VENESECTION

Von G. Morawitz writes as follows in the *Deutsche Medizinische Wochenschrift*, 1910, No. 7: In cases of chlorosis in which the iron-therapy had no effect venesection is indicated. Small bleedings, to the amount of 50 to 100 cubic centimeters (1 1/2 to 3 ounces) and repeated from time to time, may be useful. A more important indication for venesection is uremia, especially in acute nephritis. From 250 to 300 cubic centimeters (8 to 10 ounces) of blood should be withdrawn and then half a liter (one pint) of 0.5-percent salt solution injected subcutaneously. In chronic nephritis a certain amount of improvement of conditions may be obtained by this procedure, while in acute nephritis the results are brilliant.

In eclampsia, also, the results of venesection are favorable. In disturbances of the circulation, especially in the treatment of cardiac disturbances under plethoric conditions, venesection may be of advantage. So in pneumonia, with circulatory obstruction, venesection is indicated, to unload the heart temporarily.—*Wiener Med. Wochenschr.*, 1910, No. 12.

[If we live long enough to be quite old we may live to see and hear of things which we saw and heard of when we were quite young in the profession.—THE GLEANER.]



The American Medical Student

THIS number of THE AMERICAN JOURNAL OF CLINICAL MEDICINE is respectfully dedicated to the American Medical Student. There are many of him. According to *The Journal of the American Medical Association* there were 22,145 students pursuing medical studies in this country last year. Of these 20,554 were in attendance at regular schools, 899 at homeopathic, 413 at eclectic, 52 at physio-medical, and 227 at unclassified colleges, respectively. A year ago there were 4,442 graduates in medicine. There has been a slight decrease within the last few years in the number both of students and graduates.

According to statistics submitted at the last meeting of the Council on Medical Education there are 160 medical schools in this country, as compared with 172 in all the rest of the world. In Germany there are 20 medical schools; in France 5; in England 21; in Scotland 8; in Austria 7; in Russia 10; in Spain 9; in Mexico 1; in Argentine 2; in Brazil 3. We certainly have our share!

There is the same disparity in the number of physicians. In Europe the average is probably one physician to 1500 or 2000 people. In the United States there is one to 655, according to the figures of the Carnegie Foundation, though others make the professional congestion even greater. It should be recalled, however, that this country is the richest in the world. The average income is higher than anywhere else. The people are much more able to employ the medical man than in the old world, so resort

to him much more frequently. In spite of the large number of physicians the position of the medical man in America is far above that of his brother in Europe.

In order to get some information of interest and value concerning our coming men we addressed a form-letter to the presidents of the graduating classes of different American colleges. We received replies from about fifty. While the reports are not complete enough to give accurate statistics, they at least present facts of interest which warrant some interesting deductions.

For instance, we learn that of the members of these graduating classes more than 25 percent are degree men—graduates of literary colleges. Of the remainder many have received a partial college-course or normal or other advanced instruction. Only in a very few classes are there no college-trained men. In a few, nearly every man has an academic degree. In Western Reserve, for instance, 19 out of the 21 members of the senior class have received college degrees. If there is one thing more striking than any other about the “new” doctor it is the superior quality of his general education, as compared with that which was required from us old fellows of two or three decades ago.

More than 42 percent of the members of these classes expect to secure hospital positions. Doubtless this percentage is high, as expressing the desires of the young men rather than likelihood of the full realization of those desires; undoubtedly many will fail to secure appointment. But certain it is that a constantly increasing percentage of



A. C. BRODERS
Medical College of Virginia, Richmond

our recent graduates are seeking hospital internships. They realize that the medical education is not rounded out without it, and that the young man who really desires to make a name for himself in medicine must have this invaluable training.

Thirty-six percent of the graduates expect to locate in the larger cities, 64 percent in the country. This probably represents a fair distribution according to population.

From one of our questions we secured some interesting replies, i. e., as to the percentage favoring self-dispensing on the part of the physician. There was a remarkable variety in the answers. In a few schools there was practical unanimity in favor of prescription-writing, in others nearly every student preferred to dispense. In the homeopathic schools 100 percent purpose to dispense their own remedies. In one of the Baltimore schools (not Johns Hopkins) apparently no one favored self-dispensing (I think the class-president did not take a vote of his classmates), but the percentage favoring it varied generally between 25 and 90 percent.



PAUL M. CURRER
College of Physicians and Surgeons, Chicago

The average is closely represented by the University of Michigan, in which 65 percent are said to favor self-dispensing.

This fact, however, is to be noted: In classes in which the number of those purposing to practise in the cities preponderates, more are favorable to prescribing; where the number expecting to locate in the country and country towns is the greater there are more who expect to dispense. The influence of the medical faculty probably has a good deal to do with the predilection of the members of each class. When Professor "A" constantly presents the advantages of writing prescriptions the members of his class generally follow—till they leave college! There is no doubt that self-dispensing is becoming more general and more popular. The possibility of securing remedies which are easily carried and dispensed, that keep well, are accurately dosed, and *deliver the goods*, leads to dispensing inevitably.

Some interesting comments are elicited. Thus, in reply to the question, "What led



D. I. PAYNE
Memphis Hospital Medical College



ALLEN M. GIDDINGS
University of Michigan, Ann Arbor

you to study medicine?" one man said: "The close friendship of two enthusiastic physicians, the desire to know for myself the things they know, and the belief that our profession is the noblest of them all."

The president of the Maryland Medical class, replying to another question, said: "Our instructors have ever taught us to treat the patient that has the disease, not the disease that has the patient." While the Western Reserve man, speaking of the ideals of his school, said: "It teaches its men to consider every patient a separate individual to be studied and treated with simple drugs of known composition and action, so far as possible."

Our profession may well be proud of the young men who are entering it. They have the basal education necessary for their own success and for the further elevation of the standard of American medicine. Time was that our medical colleges did not inspire much pride, and excited some derision in other countries. That time has gone by. Our schools, the best of them, will bear

favorable comparison with any in the world. Our young men are doing their share for the advancement of scientific medicine, and the additions to medical knowledge are stamped every year with an enlarging list of names of American physicians. As a general practitioner or a specialist the American doctor is the best (in the sense of being the most practical) in the world. I say this in no boastful way, but because I believe it to be absolutely true.

On the accompanying pages you will see the pictures of some of our young men of the future. It is a portrait gallery to be proud of. Look at their faces carefully. Many of them appear in print today for the first time, but most of them (I hope every one) will be heard from again.

THE YOUNG DOCTOR'S OFFICE EQUIPMENT

I can hardly speak too forcibly to the young man starting out in the practice of medicine regarding the importance of the

equipment, care and appearance of his office. To him who has unlimited resources behind him [my remarks will mean little in their specific application, for they are addressed to those who start their professional life in small communities, and particularly in towns, where there is neither public water or electricity. For this reason

The way in which your superiority will be most readily manifest is in the condition and equipment of your office. Drs. Smith and Brown probably have an office outfit consisting of a kitchen table, a rusty stove, four or five broken-backed chairs, several large and overflowing cupboards, and an accumulation of plenty of dirt. To suggest



The graduating class of the Chicago College of Medicine and Surgery makes us a call.

I do not include electric apparatus, barring a diagnostic set, for I have found that batteries are unsatisfactory for most of these purposes; neither do I include any "show-off" stuff. The general principles, however, apply to every new practitioner everywhere.

Do not, under any circumstance, let the size of the town determine your own size. If your sphere is small, resolve to enlarge its scope and your usefulness to the last possible point. If you are of only the same caliber as Dr. Smith and Dr. Brown, who are well known in the community, how can you expect to gain any practice except among the deadbeats and "floaters" who always flock to the "new doctor," to his no great professional, social or financial gain. Be a little better than the best, and let your work and your surroundings show it.

the professional character of the occupant, there are added to these a discarded barber's chair, a case with a few dilapidated books and rusty instruments, and a dark and noisy closet filled with stale drugs and filth.

As for yourself, always remember: cleanliness is cheap; *so be clean*, whatever else you do or do not do.

Make at least two rooms of your office, even if the available space is not more than 10 by 12 feet, for it is essential to have a private place for consultations and treatments.

Now for the equipment, to come within a sum not exceeding two hundred dollars:

For the Waiting Room:

One-half doz. wooden-seat dining chairs (two of these—preferably painted white—may be used in the consulting room)	\$ 5.00
Rocking chair	3.50

Small bookcase	2.00
Library table (on which keep interesting reading matter)	3.00
Floor covering (linoleum)	5.00

For the Consulting Room:

Roll-top desk	15.00
Desk chair	4.00
Bookcase	8.00
Filing system for case-records and accounts	15.00
Floor covering (linoleum)	5.50
Surgical chair	35.00
Compressed-air tank, with accessories..	25.00

of drugs or instruments, both of which must grow out of the needs and abilities of the individual. It is foolishness and money wasted for the beginner to load himself up with a ready-made "outfit" of drugs and instruments; these should come as needed, and only so.

I have taken it for granted that you have books and pictures, without which any office, no matter how pretentious, looks more or



The graduating class of the College of Physicians and Surgeons (Medical Department, University of Illinois) visits CLINICAL MEDICINE

(I do not recommend the expensive nebula apparatus.)

Case for medicines and instruments (this can be made by the local carpenter to meet the needs and fancy of the individual, and will enlist the carpenter's interest)	10.00
Dressing table (glass)	5.00
Electric diagnostic outfit	30.00
Irrigator	3.00
Uranalysis outfit	5.00

This leaves \$20.00 for stove, lamps, white sash-curtains, and other minor necessities.

I have not included in this list a microscope, because it could not be got into a \$200-equipment. However, if you can afford it, buy one, by all means, for no one appreciates its value like one who has to do without. Neither have I included a stock

less like a hospital or a howling wilderness. Make your office as cheerful and homelike and interesting as you can. Give your patients a chance to forget that they are sick; do not force it on their attention by the gloomy character of your surroundings. Materially fitted out as here suggested and mentally equipped with the firm resolution to keep all clean, neat, systematic and as attractive as possible, combined with an earnest desire to do thorough and conscientious work, any young man of ordinary attainments should make a success from the start.

GEORGE B. LAKE,
Wolcottville, Ind.



S. WILMER TUNNELL
Medico-Chirurgical College, Philadelphia



RICHARD LYNCH
Barnes University, St. Louis

EMERGENCIES FOR THE YOUNG PHYSICIAN AND HOW TO MEET THEM

The editorial call in the April number of *CLINICAL MEDICINE*, for a few words of help for the young doctors about to begin their work, is timely, commendable and deserves a ready response from the more experienced members of the family.

It is a well-known fact that even the best of our medical colleges, with all their modern facilities for teaching the theory of scientific medicine, are sadly deficient in the giving of practical things such as are called for in this editorial.

I wish to write of a few of the common emergencies that are sure to come to the young doctor and how he should meet them.

The young doctor as well as the old one must be prepared to care for emergencies at all times, as well as in all places. He should bear this in mind in buying his equipment. Some operations may wait until instruments may be ordered, the emergencies never.

Obstetrical cases are practically always emergencies and most frequently come at night. Keep the obstetric bag carefully and completely packed, use it for no other work and keep it at the home. Clean and repack it immediately after every use. It should contain: Lysol 4 ounces, ergot 4 ounces, chloroform 2 ounces, benzoinated lard 2 ounces, sterile talcum powder, sterile package of umbilical tape, towels, gauze for packing uterus, gauze packer, roll sterile cotton, baby scales, pair of artery forceps, needles and ligatures, brush and nail cleaner. This is recommended as the minimum outfit for the ordinary cases.

Accidents of various kinds are likely to happen when the old family physician is out, when "most any one" will do—and the young doctor gets his opportunity. Be ready to go and go quickly. This necessitates having a small surgical case always ready. This should contain a small hand-case of emergency drugs, sterile towels, gauze, bandages, cotton, ligatures, sutures, needles, needle-holder, artery-forceps, plain

forceps, dusting powder, antiseptics, adhesive plaster, etc., with which most small accidents may be nicely cared for.

Burns and scalds are very common causes of emergency calls. An ounce bottle of picric acid kept in the emergency case will be a most invaluable aid. Apply this directly to the affected area in a strength of 1-2 to 1 percent by means of a layer of gauze or cotton. It stains a deep yellow, and may set up a dermatitis in sensitive skins, but gives prompt and decided relief. Try to learn if possible before responding to an emergency call the nature of the case, so that if it requires something not kept in the bag it may be taken along.

The chief emergency case is the hypodermic-syringe case with tubes containing: H-M-C, strychnine sulphate, gr. 1-40, apomorphine hydrochloride, gr. 1-10, atropine sulphate, gr. 1-100, morphine sulphate, gr. 1-4, cocaine hydrochloride, gr. 1-4. These tubes should be kept in the case, should never be empty, and the outfit should never be out of the physician's pocket day or night except when in use. The H-M-C is an article that may be absolutely depended upon to take care of all pains, however severe. Cases of labor may be rendered practically painless, dislocations may be reduced and fractures adjusted without assistance and with very little pain by its use.

Apomorphine is invaluable in acute gastritis, acute alcoholism and hysterical crises. Its action is prompt and sure.

In selecting and filling the medicine-case keep in mind the emergencies. Never go without calcidin for croup. Always carry a little chloroform for inhalation in spasmodic conditions, especially in children. Be sure that you have phenacetin for the aches and pains associated with high temperature. The antispasmodic granule, morphine sulphate, gr. 1-4, Buckley's uterine tonic, calomel in 1-10, 1-4 and 1-2-grain-sized granules or tablets, quinine sulphate, 2 grains, aconitine, gr. 1-134, and effervescent saline laxative are standbys and every medicine case should contain them.

Now a few general rules for emergency calls. On receiving the call get as definite

an idea of the nature of the case as possible. Go quickly, but don't become or appear excited. On entering the room make the diagnosis quickly and *give the patient relief as soon as possible*. Remain until the immediate danger is past or until you can do no more.

Luckily the majority of emergency cases terminate favorably, but the manner of handling them often determines the amount of future practice the physician will do in that family and neighborhood.

Here is success to the young doctor in his first emergencies! E. E. WOODSIDE.

Johnston City, Ill.

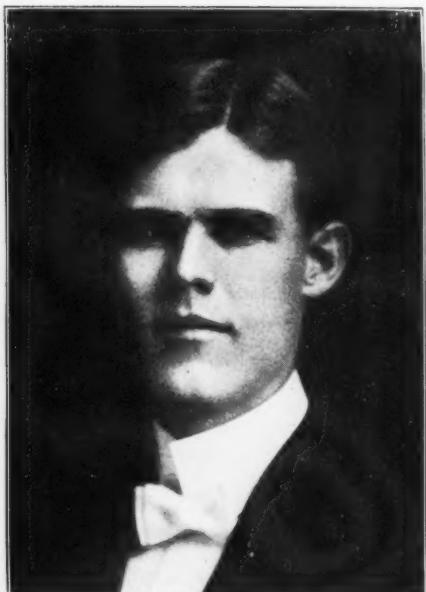
[Some mighty good advice—and not for the young doctor only.—ED.]

THE THERAPEUTIC NIHILIST, AND A LITTLE ADVICE

A therapeutic nihilist is possessed of the bugs of unbelief, and since he is a pessimist he has no use for optimists. As the bugs of unbelief in his brain multiply, it becomes much harder for him to believe in up-to-date medication. If he had backbone of his own to investigate for himself, it would not take him long to learn what modern methods can accomplish. In all my years of practice I never knew where I was until I began to investigate for myself; after that I had it pat.

So be up and doing, doctor! Shake off your pessimistic views; be optimistic! That is proper. Pitch in and start yourself anew. The days of galenics are fading fast. Make haste and join the progressive band, for, remember, this is not a fad, but has a solid foundation upon which to stand. Get acquainted with the alkaloids by following the "Guide" of Old Doctor Shaller, for therein you will find all the points gathered by him for many a year. Now, dear brother, give the method a trial, and you will never go back to the galenics, for through it you will save many a precious life, young and old.

The active-principle therapist will become more and more in demand. And



H. M. GARRISON
Southwestern Homeopathic College, Louisville



HENRY H. JAMES, JR.
Detroit Homeopathic College

what greater bliss could God put at your command than to ease the suffering of the people! It is the gift within your hand. Surely, naught could be sweeter than to do what-e'er you can for those upon whom you call, to relieve them of their pains and ills. These will surely pray for you to God to bless you before you leave this earth; and when life's journey has ended, bringing you to your well-deserved rest, you may be sure of being remembered, for they know that you have done your best, and their gratitude will follow you.

W. F. RADUE.

Union Hill, N. J.

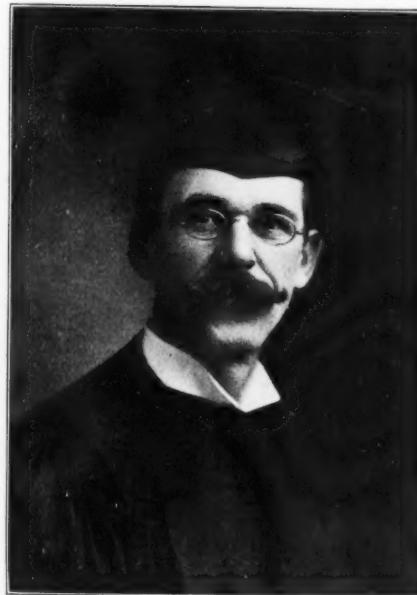
[Dr. Radue has evidently learned to appreciate the certainty of positive therapeutics. He is right. There is a great deal of comfort in being able to relieve the suffering we are called upon to treat "*cito, tuto et jucunde*," yes, quickly, safely and in a pleasant way. The certainty of action is, above all, the important point, and one which cannot be denied by any honest observer. Dr.

Radue speaks from rich, long and varied practical experience.—ED.]

CALCIUM SULPHIDE VS. ARSENIC SULPHIDE

I have had the same success with calcium sulphide as reported by others; yet I have practically discarded it in favor of arsenic trisulphide. The advantages of the latter are:

1. Smaller effective dose.
2. A far more uniform dose. You do not have to waste valuable time working up to the dose the case requires.
3. It is equally harmless in medicinal doses. It may and should be given much more freely than has been done hitherto. A milligram four times a day is a good average dose for an infant of four or five months, and five milligrams for a child of as many years. I have never noticed any tendency to cumulation of arsenic. This may be partly because it cures so quickly that I have not had to give it long enough.



J. M. ALLHANDS
Chicago College of Medicine and Surgery



ROSCOE L. DOUGLAS
Reliance Medical College, Chicago

This applies to the yellow trisulphide, not to the red monosulphide of arsenic, which is a very different remedy. The latter gives the effect of arsenic only, but is less toxic than the arsenical acid compounds. The yellow trisulphide of arsenic gives the effect of sulphur only, but is so soluble that a little goes a long way.

CHAS. F. MORRISON.

Springdale, Wash.

When we received Dr. Morrison's letter we made the following comments thereon concerning the relative advantages of calcium sulphide and arsenic trisulphide:

"In regard to the relative advantages of calcium sulphide and arsenic trisulphide, let me suggest that while the lines of usefulness of these preparations cross, it certainly is not advisable to use them interchangeably. Calcium sulphide is the remedy for acute conditions and for the more active infections, especially with the staphylococcus and other pus-germs. It also acts beautifully in cases of whooping-cough, acute

contagious diseases, and even in tuberculosis, where it is desired to saturate the patient as completely as possible with the sulphide for its germicidal effect. In using the calx sulphurata we are able to give very large doses and there is no complicating toxicity, as there may be when the arsenic salt is used.

"The special field of usefulness of the arsenic trisulphide is in the more chronic affections where in addition to the sulphur radicle there is need for a reconstructive, as in scrofulous children, chronic gonorrhea, and various skin disease, such as psoriasis, chronic eczema, etc. In many of these cases we use these two preparations together, especially in gonorrhreal rheumatism.

"Both remedies are useful. Neither, in our opinion, can take the place of the other. The yellow trisulphide is generally known and listed as arsenic sulphide.

"I wish, Doctor, that you would write us a little article giving your experience with the arsenic sulphide. This is an exceedingly interesting remedy. It isn't used half as



J. ELMER CUMMINS
Atlantic Medical College, Baltimore

much as it ought to be and the 'family' should know more about it. I call on you for help for it is apparent that you have had a large experience with the preparation."

Dr. Morrison replied as follows:

"With regard to the sulphides: I started out with exactly the view that you take in your letter. My experience, however, leads me to believe that arsenic trisulphide is better than the calcium salt in acute conditions. In some cases the calcium salt leaves nothing to be desired, in others it does. In many cases the arsenic salt gets to work much quicker than the other, and it may be given in much larger doses than heretofore with perfect freedom. You have no more cause to be afraid of it than of strychnine.

"That is all I have to say about it. I now put it up to you. Have you ever given arsenic trisulphide a really fair test in acute conditions, and in large doses? If you have, I don't believe that you would write as you do. If you have not, you simply do not know the drug."

We shall have to confess that we have not tried out arsenic sulphide in acute con-

ditions as exhaustively as Dr. Morrison has. We know of its extreme value in many of the chronic ailments, especially in the treatment of gonorrhreal rheumatism and other diseases of a subacute character. However, we still believe that in acute conditions calcium sulphide is the better remedy—and the safer one. Arsenic trisulphide contains 60 percent arsenic and 40 percent sulphur, approximately. We seldom desire to exceed 1-20 grain of arsenic at a dose, while we often want to give a grain of the sulphur; how are we going to accomplish the latter without a toxic dose of the arsenic, if we depend on arsenic sulphide? But we are open to correction. We therefore invite the members of the "family" to try these two remedies side by side, in exactly the same class of cases, and if they find that Dr. Morrison is justified in his views, we want them to write and tell us so. Here is an opportunity for some nice clinical work which may be of the utmost practical value.

FROM A HUSTLING STUDENT—NOW
A DOCTOR

As I finish my course in medicine at the Chicago College of Medicine and Surgery I want to say a word to the boys in my own and other schools who are planning their medical literature which they now need. I believe that the student will get more information of real practical value from *THE AMERICAN JOURNAL OF CLINICAL MEDICINE* for the money invested than he can get from any other source for twice the money. The journal is filled with original articles which are concise, right to the point and easily understood and they come hot from the field of practice. There are no long, drawn-out and mysterious theories, but a world of fact, born of actual experience. This is the kind of stuff we young men of the profession need. Too often in the schools we are surfeited with theorizing; we need to sit for a while at the feet of the older men of the profession who have been doing the work of the sick-room, and learn all we can from them.



ELISHA S. SEVENSMA
Detroit College of Medicine



H. D. JUNKIN
Chicago College of Medicine and Surgery

The Post-Graduate Course, which Dr. George F. Butler is giving us in CLINICAL MEDICINE, is alone worth many times the subscription price. It contains much valuable information which cannot be found in any book or set of books, and has been very helpful to me in my recent studies, as it is one of the most attractive features to others. I know, for I have talked this course, and as a result have secured more than one hundred subscriptions to CLINICAL MEDICINE during the last two or three months. The majority of those who have subscribed have expressed themselves as being more than pleased with it, and I have not had a single complaint.

Juniors, why not some of you pay your tuition in your next or senior year by taking subscriptions? It is a real pleasure to represent THE AMERICAL JOURNAL OF CLINICAL MEDICINE, as one feels that he is giving every subscriber more than his money's worth. You can meet your patrons and fellow students afterward and they feel more kindly toward you than ever,

because you have given them something that they appreciate. The CLINIC is a verification of the publisher's motto—"a square deal."

J. M. ALLHANDS.

Chicago, Ill.

[We are glad to have an opportunity to publish Dr. Allhands' letter, for one reason because it gives us an opportunity to "speak out in meetin'" and tell how much we appreciate the hard work which he and others like him are doing for CLINICAL MEDICINE. He is our banner agent this year, though others are doing well, many of "the boys" making a very respectable addition to the all-too-scanty fund of spending (or board-bill) money of the average senior medical student. If this comes to the eye of any junior medical student who thinks he could use an extra hundred or two next year he is cordially invited to write.

Dr. Allhands is *sure* to make good. It has been our experience that the boys who have the grit to hustle for their "coffee and

sinkers" while they are fattening their brain-cells "get there" before the race is over, though they may be outstripped at the start by those who carry no financial handicap. Luck to you, Doctor, in your new home down among the North Carolina hills! Juniors, you're next.—ED.]

SOME BACK NUMBERS WANTED

One of our oldest subscribers and best friends is trying to complete his file of CLINICAL MEDICINE. He is short the volume for 1904. We have been able to secure all the numbers except those for February and May of that year. Can any of our readers supply them? If so, we shall appreciate it very much, and the doctor will be under even greater obligations.

EXPERIENCE WITH CHROMIUM SULPHATE IN APHONIA AND ATAXIA

Relative to the use of chromium sulphate, I wish to report my experience with this drug, the first one being of especial interest, as it shows an untoward effect of the drug.

Case 1. Locomotor ataxia, paralysis of lower extremities, suddenly developed an aphonia which failed to yield to mercury or salicylates combined with local treatment. I administered chromium sulphate, grs. 8 three times daily for twelve days, when at the end of this period the aphonia showed marked improvement. I now gradually raised the dose until at twelve days (twenty-fourth day since administration began) the patient was taking 60 grains a day.

Until this time the two prominent actions of the drug were relief of the aphonia (which by the twenty-fourth day had practically disappeared) and increased flow of urine. After taking 60 grains daily for seven days he became nauseated, lost his appetite (which until this time had been excellent), experienced a taste of sulphur, his breath smelled sulphurous, and finally he began vomiting, the vomitus being green in color and of sulphurous odor. The drug was immediately stopped, and in three days the untoward symptoms had cleared up, as had

also the increased output of urine. After several days the drug was again given in dosage of 24 grains daily. There were no more disturbances of appetite, but in forty-eight hours the urine became increased in amount.

Two months have elapsed since the foregoing occurred, the chromium having been taken steadily, but there has been no amelioration of his ataxic symptoms. The aphonia has entirely disappeared, and there have been no more digestive disturbances.

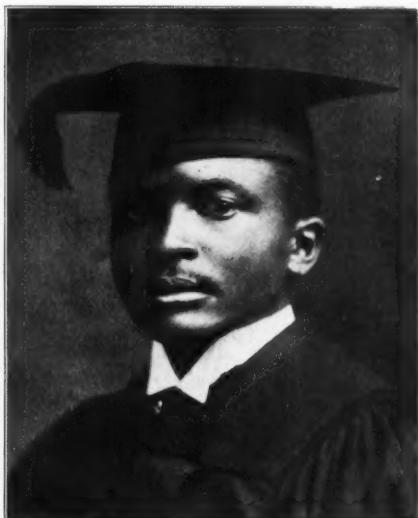
Case 2. Female, aged 45. Three years ago she had a growth (character unknown) removed from her vocal cord. When first seen there was a partial aphonia, and examination showed fibrosis of the cord. I began giving chromium sulphate, 20 grains daily. For a short time there was improvement, but gradually (under increased dosage) the aphonia returned to its former state, and has continued so for the past three months.

ARTHUR D. KURTZ.
Roanoke, Va.

[In about half of the cases of locomotor ataxia (as reports come to us) chromium sulphate seems to be of benefit, in greater or less degree. Best results from its use apparently occur in cases of prostatic hypertrophy, exophthalmic goiter and neurasthenia. Theoretically, assuming that this remedy has some specific action upon fibrosis, it should be valuable in interstitial nephritis. Who will try and report? As yet we know little about the drug or how it acts, but the really remarkable results frequently following its use encourage to further trials. It seems to us that the doctor's dosage was excessive in case 1.—ED.]

CLINICAL EXPERIENCE WITH CALCIUM SULPHIDE

No man is so much at home as when among his kind. What I have to say I wish to impart in the simplest form, shorn of technical phrases, to save time and space; for, after all, those who love us most are the patients successfully treated, showing that



S. B. BANKS
Meharry Medical College, Nashville



A. S. MAGEE
Louisville National Medical College

results are the only real stepping stones to advancement.

I write of calcium sulphide, because I have learned to depend upon it as a remedy which gives results when properly used in the right kind of cases. Don't expect it to cure everything. It certainly will not do that.

Everybody knows what calcium sulphide is. However, not everyone knows why he fails to get results when using the drug unless he has been long in practice. Even then we older fellows get "stung." After we are sure a given drug used is not a prime article, it is often difficult, many times even impossible, to obtain a supply of proper quality.

I had tried calcium sulphide periodically during two or more years before discovering three important things, namely: (1) The drug I used was not all it should be. (2) I prescribed it in too small dosage in deep-seated asthenic cases, and in too large doses in sthenic cases. (3) A few common symptoms could be relied upon in all cases, regardless of the disease so named.

After I discovered and corrected these errors, classifying my pathologic conditions objectively and symptomatically, I found

calcium sulphide, when of reliable quality, to be one of the most useful drugs in the whole *materia medica*, for abnormal lesions. In this paper I will try to give an outline of what I actually do in daily practice, describing a few of the different classes of cases in which I am prescribing this agent, feeling sure that those who thus far have not used it extensively will feel more inclined to do so. Then, if they will bear in mind the things I say, together with the indications I find favorable to its administration, forgetting the name of the diseases mentioned in this connection but solely relying upon their own judgment and ability to improve upon what I have tried to do, they surely also will be admirers of calcium sulphide (alkaloidal) and enlarge its field of application, to their own satisfaction and great benefit of their suffering patients.

Calcium sulphide usually is indicated in the case of skin eruptions due to the absorption of toxins from putrefying food retained in the alimentary tract. You may feel certain in regard to these manifestations; they are always present in disease although in acute cases, especially in sthenic ones, time has not elapsed sufficient to involve the

glandular and lymphatic systems. In such cases I am guided by the temperature if this indicates the presence of pus. In lues I use calcium sulphide extensively together with minute doses of protoiodide of mercury, or with an active vegetable compound (such as equal parts of kalmia, phytolacca, corydalis and pulsatilla) if the case has been too long upon mercurials.

There is no stage in which calcium sulphide is not indicated, certainly not in acneic or other cutaneous conditions.

It is also indicated in all septicemias, tuberculous abscesses or sinuses, with purulent secretions, in phthisis, deep-seated tonsillar abscesses, follicular tonsillitis, and caruncles. In all such conditions it is well to increase the dose rapidly to nausea, then go back to small doses, gradually increased to the point of tolerance.

At present I am using this drug in a case of degenerative uterine fibroids; in one case of phthisis, and one of lues in the tertiary stage, and I find it one of the most satisfactory and useful agents I have ever used.

Similarly I have been treating three cases of tonsillitis, two of which are chronic who report having "quinsy" twice a year regularly, the third being one of follicular tonsillitis. The two chronic cases had every evidence of a deep-seated abscess forming and the patients assured me they "would have to have it lanced when the time came if it did not break before, as that was what it always did." In each case the tonsil was greatly swollen, purple, but there was no sign of pus on the pharyngeal surface; there was throbbing pain, and the cervical glands were noticeably swollen. I gave aconite, gelsemium and veratrum to aid the circulation and allay the nervous anxiety, and six 1-2 grain pills of calcium sulphide every three hours for four or six doses, then three or four times a day. I assured them I expected to abort the attack and I did. The patient attacked with follicular tonsillitis was confined to her bed, but in two days was back in her office. These are only a few of the latest experiences. All three were quite ill at the time I was called.

In two cases, where I am sure of the diagnosis being one of lues, I have had a very singularly gratifying experience. The first one evidently had "mixed infection," and in about four weeks was one complete mass of rose-colored papulosa with characteristic throat complication. There was iroconjunctivitis, and that headache so persistent yet hard to describe—"a maddening pressure." The one other strong feature was an intracostal neuralgia in the left side at about the sixth intercostal space that was difficult to relieve. I placed the patient on mercurous iodide and colchicum, alternating until I found the point of tolerance, then gave less protoiodide and more colchicum. For the acute symptoms I gave aconite, gelsemium, bryonia and rhus tox. This treatment was kept up three or four weeks, when all symptoms were gone except a cervical catarrh. After that was cured the patient continued well, apparently, and stoutly refused to take another dose of any medicine, especially those "rotten pills."

About ten or twelve months later a round open ulcer appeared on the calf of one of his legs which refused to heal. After much persuasion I succeeded in getting her to take treatment for about two weeks; then the patient again refused upon the grounds that she "felt fine." Two months later throat and eye symptoms reappeared. This time the patient accepted a course of the vegetable compound, and of course, I gave calcium sulphide—"those rotten pills." After a two-months' course I allowed a year's rest. At present the woman appears perfectly healthy. This person should have two or three months of treatment every year for three or four years, and I believe a cure would be perfected. The following case is especially important:

Woman, primipara, 38 years old. Two years ago, upon her marriage, primary infection occurred. I did not treat her then, but have a full report and knew about it. One year later the woman became pregnant. Being consulted about the sixth week, I advised abortion, telling why. This was refused, still my services were earnestly solicited. After fully acquainting

them with the fact that the only hope for a healthy child was in a full and constant course of treatment, this applying also to the child, should it live. Accepting the case, I gave the vegetable compound, named above, during the first month, then in conjunction with calcium sulphide. At full term the woman was delivered of as fine a girl baby as I ever saw, perfect in every way. I advised artificial feeding. Here again I met an insuperable obstacle, so continued the medical course for the mother. It is nearly a year now and the baby is as well as any child. One feature during the whole course that worried me at all was an occasional and severe inflammation of one labial gland, which at various periods threatened to suppurate.

Out of some twenty cases I selected the two here reported because they were so easily treated. But I had cases where the patient's whole eyebrows and hair came out, teeth got loose, finger-nails stopped growing, loss of eye (due, as we all know, to plastic iritis adhesions), and some had been through the mercury-course until it was a question which was the most at fault, the treatment or the disease—and in each instance, as soon as I could relieve the acute symptoms, I put them upon what you may call my calcium-sulphide course. This remedy does not injure the system, is acceptable to all, gets results, and, properly administered in conjunction with alteratives as here suggested, is, I believe, the best course for all such classes of cases.

In closing I wish to impress the imperative need of a *constant watchfulness* over the bowels, skin and kidney. I prescribe a systematic course of baths, and keep the bowels normal, and *refuse to treat* any patient that will not obey my instructions regarding these matters.

F. E. HUFNAIL.

Minneapolis, Minn.

[This article is a remarkable tribute to calcium sulphide. It is a remedy in which we have great faith, one that we think is not appreciated as it should be, largely because much of the drug usually sold is of inferior

quality. Of course one cannot get effects from calcium *sulphate*; the real *sulphide* can be depended upon to make good in proper cases.—Ed.]

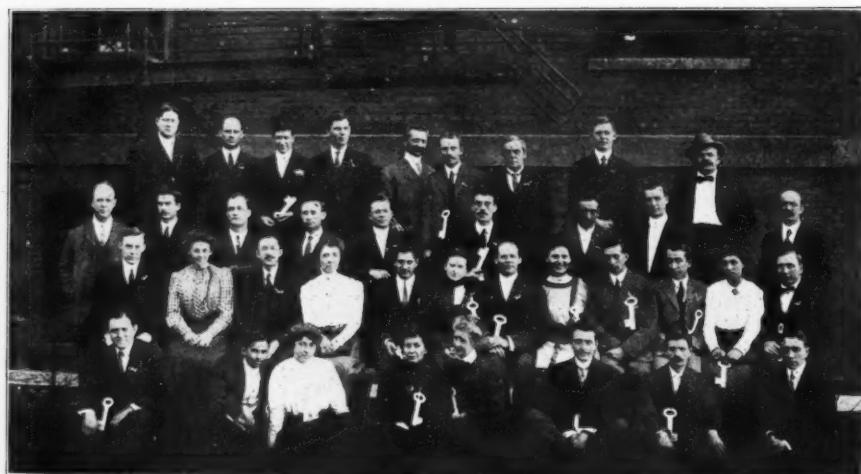
ON STRYCHNINE IN PULMONARY CONGESTION OF THE AGED

Goyard relates the history of an old man, whom the shroud had already enveloped, literally snatched from death by strychnine, which a providential chance (in the shape of a dosimetric physician) had come to put in the hands of his nondosimetric adviser. The princes of the science say that to a powerful organism fighting despairingly against an evil the official art can bring no succor. Is it an aid, then, this morphine, which acts essentially by preventing the respiration and the heart exhausting themselves too quickly and resting paralyzed under the pressure of the sanguine congestion? Morphine subcutaneously constitutes, in respiratory maladies, especially asthma, a puissant eupneic, but one that must be managed with extreme prudence, as Mora has well said.

This medication should only be employed at the debut, and should be absolutely proscribed when the malady has entered the anatomic period, for then the remedy is worse than the disease. Everybody knows that opiates congest the cerebral and nervous centers, provoke dyspepsia, extinguish bronchial sensibility, and favor the accumulation of the exudates and of carbon dioxide, determining a fatal mechanical asphyxia. Hence we derive one leading indication for the alkaloidal vital incitants, which maintain the electric circulation of the nerves.

Nobody familiar with the active principles can read of an old man ill with pulmonary disease but that *strychnine* comes to mind. How many cases have been recorded where this remedy, alone or as dominant, has at the supreme moment come in time to prevent the work of death.

1. Bourdon tells of a woman, aged 76, anemic and debilitated, attacked with a left pulmonary congestion verging on pneumonia, with considerable oppression, moderate fever and irregular heart action, sputa



Graduating class of the Bennett Medical College. Please notice that some of us at "alkaloidal headquarters" have "butted into" several of these class pictures.

viscous and blood-streaked, who was cured in a few days by expectorants associated with digitalin, but notably strychnine, which latter in truth recalled her to life. The following year she was buried as the result of similar conditions combated by the classic treatment.

2. A woman, aged 40, in the asphyxial period of pneumonia, treated by defervescent and alcohol, was kept alive from day to day by the intervention of strychnine, which induced a veritable resurrection.

3. A woman, aged 43, with a very grave pneumonia, for which she had been given up, was saved by strychnine given progressively and even passing a little the doses thought to be the limit.

4. A patient, aged 20, at the asphyxial period of a pneumonia which, from the base, had extended to the apex, was rapidly carried out of the danger by strychnine, dry-cupping, etc.

In all these cases strychnine played the leading role, and showed itself the true "war-horse" of the physician. To quote further examples would be useless repetition. The records of active-principle medication are crowded with similar cases.

As Goyard says, the employment of strychnine in the pulmonary congestion of

old men, with or without cardiac complications, is a classic fact, a means sure and without danger, a heroic resource. He adds: "How long will the powerful weapons of dosimetry be confined to the hands of these adepts alone, these men whose one thought is to cure?"

Germain Sée demonstrated the famous expectant treatment, imported from Austria at the Pitié hospital, and those who followed his clinic, as Bourdon caustically remarks, were not impressed by the results. One looks to the zymase, another to the microbe; each wars against his enemy, agreeing in reliance upon expectation, nutrition, alcohol and antipyretics. Sée speaks learnedly of "defending the besieged city," and, unable to destroy the assailant directly, of furnishing to the besieged such munition as will enable him to prolong his defense and tire out the enemy.

Trousseau said wisely, "It is not medicaments that cure, but the manner of giving them."

The action of antipyretics is not the same when given alone as when administered in conjunction with strychnine, the latter enhancing their action in a remarkable degree. It seems that in some cases the nervous centers are too depressed to permit

the necessary reaction with these agents, until the stimulus of strychnine is added.

One must not forget that it is not a question of treating pneumonia, but of treating pneumonias and pneumonics.

With the aged the organic fibers lack elasticity, he does not react from a shock, but rests depressed. Instead of putting him to sleep with stupefants it is necessary to awaken him, sustain him, incite him, excite him, maintain him in time at any cost, for without this there is death. "In pneumonia, by the use of strychnine, the paralysis of the lung is lifted, the respiratory distress gives place to normal breathing; and even if the parasite is not completely destroyed or eliminated, the cardiovascular energy is at least fortified, the nervous forces are raised up again, so as to permit the organism to contend victoriously against the parasitic infection."

WILLIAM F. WAUGH.

Chicago, Ill.

FUTILITY OF QUARANTINE IN SMALLPOX

In the winter of 1880-81 we had, in our locality, an epidemic of smallpox. There were, at the start, twenty-eight cases, all healthy men. Of this number twenty-six died. This happening was accompanied and followed by a period of general vaccination, the good effects of which have been verified by two subsequent epidemics—one occurring some eight years ago, and one within the past eight months—in which there have been more than one hundred and eighty cases, and, to my own personal knowledge, not a single death. The last series of cases occurring here since last November numbered a little more than one hundred forty cases, and included persons of all ages, and in all conditions of life. The beneficent results of vaccination were everywhere apparent, whether direct or inherited. And here I want to insist upon the fact that a mother who has been made immune by vaccination may impart that blessing through her blood to her offspring; and it is for that reason we may find it im-

possible to get vaccination to take in such habits. For the same reason we find cases of varioloid in children who have never been vaccinated. This, also, I think, answers the question, why the disease is today different in its results from what it was formerly.

One fact is very evident, and it is this: vaccination, and not quarantine, is the remedy for smallpox, and the only one yet found that will control the disease. Germany has fully demonstrated this.

It is not alone among the poor and ignorant that objections to vaccination are heard. You will find them among the upper class who pride themselves on their culture, but which, in many cases, is only another name for selfishness; and it is among this class of people that the most trouble arises when we attempt to enforce an effective quarantine. The fool doctor whom such people often employ does not know a mild case of variola when he meets one, but, having a state certificate, his evidence in his efforts to hold his patron's good will by fighting the quarantine is one of the main causes of its failure. Among the poor and laboring class every neighborhood has an assorted lot of wise ones who "know" it is not smallpox. Two or three old grannies of leisure make daily visits for purposes of inspection and incidentally of distribution; and thus the trouble goes merrily on at the expense of the taxpayer and the business interests of the affected community.

Since last November there have been more than one hundred and forty cases of smallpox in the little city of Creston. The disease was brought to town by a woman who came from another part of the state and who, a few days after her arrival, was seized with headache, backache, and nausea. A doctor was called, who prescribed for grip, and did not make a second visit. Two days later another physician was called, who, viewing the few papulas that were then in bloom, told her she had chicken-pox, and that it didn't "amount to anything." He departed, leaving her much comforted. The family she was visiting consisted of nine adults, three of them young men, who promptly were taken down with the disease,

and, after the development of their pustules and subsidence of the fever, went back to their work in an institution employing some one hundred and fifty men and boys. The consequence was that the infection was scattered through every ward of the city before the board of health knew anything about it.

Of the one hundred and forty cases reported and kept under the supervision of the board of health a dozen were severe enough to be classed as dangerous; about twenty-five were severe discrete cases, but not dangerous; the other one hundred and three were mild cases of varioloid, among which were some five or six cases that had the prodromal aches, pains, and nausea, with fever and macular spots but no eruption, the macular spots fading away a few days after the subsidence of the fever.

In the supervision of and caring for many of these cases, I think I have learned some important things in regard to the treatment of this disease, and which I wish to set forth here.

In the beginning, clean out the patient with some unirritating laxative. Follow this with mild antiseptics and give concentrated, nourishing diet; cooling drinks, such as lemonade especially in children; and, from the beginning of the eruption until the scabs fall off, keep them well anointed with carbolated vaseline. Let the papules and the pustules severely alone, unless you want some permanent scars to remember the occasion by. In the severe cases, where confluence is threatened, spread on the carbolated vaseline thickly. Internally give a grain of calcium sulphide every three hours for two days, then every six hours until the trouble subsides. See to it that the patient has fresh air, and lots of it.

WILL D. CHRISTY.

Creston, Ia.

[The above is an abstract from a paper read by Dr. Christy before the Iowa Association of Health Officers, October, 1908. The doctor feels strongly about the supreme value of vaccination, and just as strongly against quarantining, and properly so.

The disadvantages of the latter have been amply demonstrated, because it cannot be efficiently carried out, as is pointed out by Dr. Christy.—ED.]

HOW CALCIUM SULPHIDE ACTS

Dr. Ussher, in his notable article on calcium sulphide, credits the efficiency of the drug to the liberation of sulphured hydrogen in the blood and its action as a germicide there. In my unaggressive opinion, if sulphured hydrogen were not eliminated by the skin, or otherwise, the patient's span of life would be brief.

Back in the dim past the parasiticidal value of sulphur was known. Many years ago the bactericidal worth of sulphur, its compounds and conjugates, was appreciated. Nearly a half century ago Polli, the Italian, extolled the merits of the hyposulphites and sulphites in pyemia, glanders, typhoid fever, etc. The subject to which I beg your attention and consideration is this: How and why does calcium sulphide act as a blood disinfectant and germicide, and as a preventer and absorber of pus formations?

My theory, put forward with modesty, is that the sulphide is split and disorganized by the gastric juice. Calcium chloride is formed, sulphured hydrogen is given off, sulphurous acid, alone or in combination, is formed and absorbed into the blood, and this, together with the calcium chloride, is the immediate active agent in producing the beneficent effect.

I don't know why I am writing all this (it sounds dreadfully egotistic) save that you have shown interest in my scribblings and were kind enough to send me Dr. Ussher's article for perusal. My bent of mind is critical, and though acknowledging the great merit of the doctor's article, I could not pass his theory of the action of sulphured hydrogen without a word of protest.

J. L. de WOLFE.

West Paspebiac, Que.

[Dr. de Wolfe's article is part of a very interesting correspondence, occasioned by the perusal of some of the doctor's contributions

to other journals. It is an interesting contribution to the theories concerning the action of calcium sulphide, and we hope will excite comment and discussion. This is an exceedingly valuable remedy, and we should know all possible about it.

If calcium sulphide is taken during the period of acid digestion it is decomposed and unpleasant eructations of hydrogen sulphide are given off; but if not taken during this period it seems to be absorbed without change, whatever modifications it undergoes being effected in the blood. Hydrogen-sulphide gas is known to be deleterious when inhaled, but I have given calcium sulphide up to 50 grains a day without observing any indication of alteration of the blood, or any unpleasant or alarming symptoms. Hence my belief that it acts in the form in which it is administered, and that it is harmless.

—ED.]

PELLAGRA IN ARIZONA

While I have practised medicine for more than thirty years, yet never reported a case to a medical journal (which I admit is not to my credit, for I have seen some exceedingly interesting ones), I may not develop a fluent style at this late date. However, the following is of such interest to the profession that I cannot refrain from reporting it.

Some two months ago a Mexican girl, aged 17, came to my office with some brown patches on the forehead for which she desired treatment. I could not diagnose the trouble, so treated her symptomatically. As the patches resembled secondary luetic lesions more than anything else, I put the girl on appropriate treatment. For a time she seemed to improve, and discontinued her visits. Later on, however, she was confined to her bed, when I was called to see her.

I found the following symptoms: Purpuric patches over the face, fore-arms, hands and body; extreme depression; excessive salivation; a fiery-red tongue; ulceration of the buccal surfaces, nose, alimentary tract, and vagina; obstinate diarrhea; marked

desquamation of the skin, the line of demarcation at the wrists being very plain and significant; skin over the dorsal surface of the hands wrinkled; temperature fluctuating between normal and 102° F., and the pulse ranging from normal to 120 beats per minute.

I frankly told the father that I did not know what the disease was, and so he at once called in consultation Dr. John E. Beacon of Tomboline. After a careful examination the latter pronounced it a case either of general tuberculosis or pellagra. He took home a sample of the sputum for examination, which proved negative as to tuberculosis. Dr. Bacon then said he was confident it was a case of pellagra.

Before learning the result of the examination of the sputum, I studied the case daily, and finally concluded that it more probably was a case of scorbutus or scurvy than anything else. Knowing nothing of pellagra, I was astonished later to discover that both the medical dictionary and the only journal at my command containing anything bearing on this case gave "scurvy of the Alps" (*scorbutus alpinus*) as a synonym for pellagra.

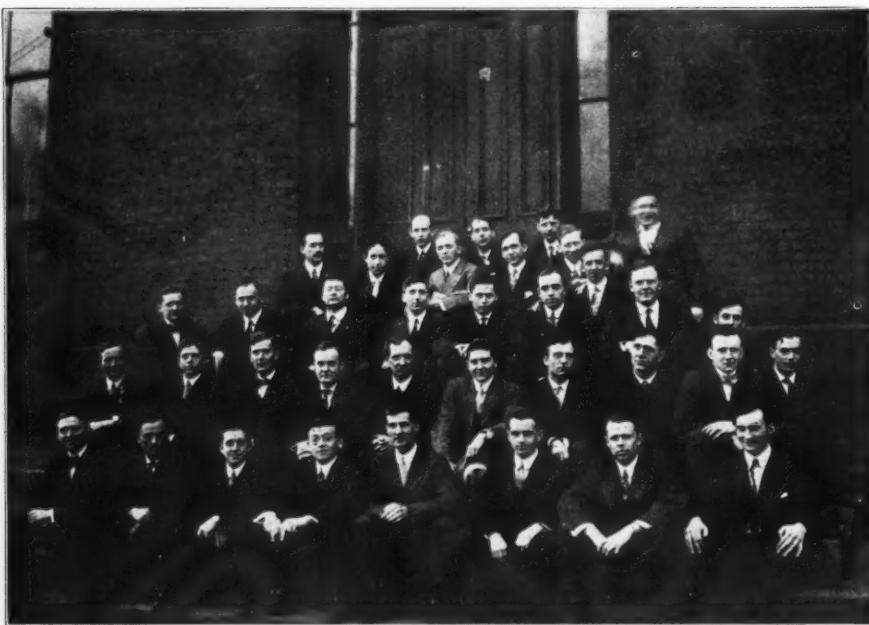
The etiology of this case is obscure. The family is of the well-to-do Mexican class, and deny that at any time they have been given to the use of Indian corn. Drs. Platt, Stratton and Warner of Safford also saw the patient, but could make no diagnosis.

I am confident it was a genuine case of pellagra, as the symptoms corresponded in every respect to those given in the Illinois Board of Health Report. The case terminated fatally within three weeks, with no amelioration of symptoms, except that there was a lessening of the intense salivation. The attack was of a much longer duration than just the time that the patient was confined to bed.

JOHN H. LACY.

Solomonville, Ariz.

[This is interesting. Cases of pellagra are cropping out in all sorts of unexpected places. Sorry the doctor secured no photo-



Senior Class of the Ohio-Miami Medical College, University of Cincinnati

graphs as these help greatly in verifying the diagnosis.—ED.]

NUCLEIN IN MALARIA

I was in the Philippines when the active principles first came to my notice. So I sent to Seattle for some of them to try. Among the remedies I selected for trial was nuclein. The little I had read about it had impressed me as eminently reasonable, and I ordered a supply of it.

A day or two after receiving these drugs, I was attacked with what I thought was malignant tertian malaria, which was very prevalent in that locality at that time. Now I have never failed to cure this form of malaria with one or, at most, two big doses of quinine on the off-day. So I proceeded to "clean out," and took 40 grains of quinine on the off-day.

To my surprise, the next day my temperature went to 103° F. whereas it was only 101° F. the first time.

I repeated the treatment, being careful to take the quinine on an empty stomach, with plenty of water, and at the most favorable interval before the expected attack. The next day my temperature went to 105° F., and I was delirious.

At this point the case became interesting. It resembled malaria in being frankly intermittent, the febrile stage lasting only about six hours. On the other hand, it differed from malaria in being unaffected by quinine; in an increase of temperature of two degrees with every successive febrile attack; in considerable prostration, with heart wavering, during the intermissions. I took acetanilid for the excruciating headache. (I have since learned to control these headaches with small doses of atropine, which beats the coal-tar antipyretics all hollow); but as I limited myself to a single 5-grain dose of antikamnia during defervescence, and as I never developed any idiosyncracy for acetanilid before, I do not think this could have affected the heart.

How I wished for a microscope. But there was neither a microscope nor a railroad, nor even a good wagonroad within one hundred miles of me. The question what the next attack would do to me also had its interest, though of a personal rather than a scientific nature.

In this crisis, I turned to the nuclein I had just received as a drowning man to the proverbial straw. My hypodermic had been ailing for some time, and now relapsed into innocuous desuetude. So I took gtt. 20 per os every two hours on the off-day. I had no other treatment whatever after the subsidence of the last febrile attack.

The next day I awaited events with interest, but nothing happened. There was no rise of temperature. (It took several months to get over the heart trouble.)

I have had a good deal of use for nuclein since then, but have never noticed that euphoria after taking it, either in myself or any other patient, except from one bottle, which arrived with a loose stopper. This had a vinous odor, taste—and effect.

C. F. M.

—, Washington.

THE USES OF MISTLETOE

Viscum flavescens, the parasitical growth on trees commonly known as American mistletoe, is found in abundance in this region. (The European variety is the *viscum album*.) I make a tincture from the entire plant by filling a wide-mouthed bottle with the stems and leaves and then covering them with full-strength alcohol; however, if recently dried, I dilute it with one-third the amount of water. This I let stand about fifteen days, then express in a tincture-press and filter the resulting amber-colored fluid. This tincture I administer in half-to one-teaspoonful doses, repeating often enough to get effects every ten, twenty, thirty minutes in urgent cases, in others every one, two, three or four hours, as needed.

I have employed this preparation for now ten years, have watched its physiologic action carefully, and have come to the conclusion that it is far superior to ergot in many of the

diseases where the latter is commonly used. Ergot contracts the circular fibers of the uterus, thus preventing that organ from dilating and emptying, while mistletoe exerts its influence on the longitudinal fibers, forces down the fundus of the organ and so facilitates labor by aiding in the expulsion of the fetus and placenta. We can give viscum without misgivings as to any possible bad effects, while ergot is almost sure to do harm.

Furthermore, viscum is a better remedy in purpura hemorrhagica than either ergot or hamamelis. It also acts well in any bowel trouble where there are copious watery discharges by constricting the mucous coats of the intestine.

Mistletoe is a splendid hemostatic in hemorrhages of the lungs or bowels. I have also obtained fine results from it, in half-dram doses given every two hours, in spastic action of the bladder in acute cystitis, and a few times in chronic cases, but failed to get the direct indication for the latter trouble.

W. H. YOUNG.

Booneville, Ark.

[Mistletoe has been repeatedly recommended in labor, in place of ergot, because it incites intermittent uterine contractions. Dr. Ellingwood declares that it is safer than ergot. Its use during labor has been earnestly advocated by Dr. W. H. Long, of the U. S. Marine-Hospital Service, upon the ground of its rapidity of action, in addition to the ability to excite intermittent contraction. Shoemaker says: "In epilepsy, chorea, asthma, and many other nervous affections mistletoe deserves further trial. In weak heart, with insufficient contractile force, it has some value; in uterine hemorrhage it has been found useful. It has likewise been employed in dropsy and amenorrhea, and is of service in menorrhagia."—ED.]

POTASSIUM PERMANGANATE

One of the most convenient remedies for use in measles, scarlatina and similar troubles is potassium permanganate. It

can be carried in a small vial and a solution can be quickly and easily made for sponging the body. Its beautiful color impresses. Whenever hot or cold compresses are to be used, rather than tell the patient to use plain water, whip out your vial of this remedy, dispense a little of it, with instructions as to the strength of solution; usually when it is of a cherry-red color will be strong enough. Squire's "Companion to the British Pharmacopeia" speaks very highly of this remedy and mentions it as being of use in diabetes. The latter trouble is rapidly on the increase in this city, no doubt due to undue mental and nervous strain, plus irregular methods of living.

F. MARSH SOPER.

New York City.

ARGYROL

With the above agent I have saved the eyes of many infants. I have cured many cases of urethral gonorrhea. I have arrested many septic infections. You must use it in not less than 25-percent solution. I often use 40 percent. It is absolutely non-irritating. It is non-toxic. It does the work—and that's the thing.

S. L. E.

—, Florida.

THE CLINIC A REFERENCE LIBRARY

Your kind letter, so pleasantly reminding me of my duty as one of your faithful subscribers, came to hand just a few moments ago. For fear that I may again neglect sending your two dollars, I hasten to comply with your earnest request and enclose the same herewith. May it come to your desk accompanied by many, yes, thousands of equally pleased and delighted doctors' remittances.

I have not long been a subscriber to the "CLINIC" (which seems to me to have been a most excellent name for Dr. Abbott's most helpful monthly), but I have all the numbers from the first issue bound and placed in prominent position for almost daily reference in my library. Why, boys, you could not

buy my yearly "books" at any price if it were impossible for me to replace them. They have proved to be invaluable to me in many a trying case. Hardly a day goes by that I do not refer to them.

May you all live long, and while you continue to live do not fail to continue giving us the very best of everything in our line.

BURTON R. MILLER.

Tiffin, O.

[Thank you, Doctor. We certainly shall try, and while our friends continue with the "boost" which has made *our* journal what it is, we feel that its continued success is assured.—E.D.]

THE CULLOM BILL—ALKALOIDAL PRACTICE

April CLINICAL MEDICINE in hand and its pages read with ever-increasing interest and enthusiasm.

I have just written our Senator Warner, *in re* Sec. IV, Cullom Bill. I am an experienced druggist, now a dispensing doctor, and I shall stop practising medicine if forced to quit dispensing. I do a lot of prescription writing, but I believe it is my privilege to dispense every dose of medicine I give, if I prefer to do so.

My druggists (and they are good men) do not ask me if they can counter-prescribe, but do it in my presence every day.

I use the alkaloidal remedies and get good results. Frequently lose the patient too soon—gets well too quickly. I use all of the following and they never fail where they are indicated, and used right. Have also induced a number of my friends in the profession to use them: Aconitine, aesculin, apomorphine, arbutin, aspidospermine (a dandy), atropine, bilein, cactin (a dandy), calcidin ("king"), calcium sulphide, cicutine (great), cocaine, colchicine, codeine, copper arsenite, digitalin, gelsemine, gلوون, hyoscine, macrotin, nuclein (fine), phytolaccin, quassia, strychnine, veratrine and a number of combinations.

General Abbott, I appreciate your fight and heartily endorse it all. I am at one of

the guns. You can depend upon me. Give your command.

M. E. BRADLEY.

St. Louis, Mo.

[Missouri has to be "shown"—but only once. Since we told the story of the Cullom bill last month we have received letters from many medical men in all parts of the United States, all protesting (except one) against this further interference with the rights of the physician. Many medical societies have already taken action, forwarding their resolutions to their senators and congressmen. Missouri leads. We have received communications from six or more secretaries of its county societies, telling of such action. We opine that the Missouri senators are fully advised by this time of the sentiment of the medical profession of that state. Other states have done and are doing nearly as well. Read the resolutions passed by a Colorado society, which follow.

Dr. Bradley expresses the sentiments of the majority of physicians. We have no desire to oppress the druggist, or to make his already hard condition less satisfactory. But attempts to legislate money into his pockets are not to be endured. Let every physician look alive, and be active. Look up again the first "Miscellaneous" article of last month, and act at once.—ED.]

RESOLUTIONS ON THE CULLOM BILL

Many medical societies have already taken action concerning the Cullom bill, which, while intended to limit the traffic in habit-forming drugs, a most desirable thing by the way, would, if passed as drafted, interfere seriously with the rights of physicians, especially those who dispense their own remedies. We print below the resolutions passed by the Larimer (Colorado) Medical Society:

THE LARIMER COUNTY MEDICAL SOCIETY at its regular meeting on April 6th, 1910, after a careful consideration and discussion of the Cullom Bill unanimously adopted the following resolutions, viz.:

WHEREAS, A BILL, entitled, "A Bill to Regulate the Manufacture and Sale of Habit-Forming Drugs" has been recently introduced into the

United States Senate by the Hon. Shelby M. Cullom of Illinois, and,

WHEREAS, As said bill discriminates against physicians and if enacted into law and enforced would greatly hamper them, especially those in remote rural districts, in their work of relieving suffering, and in many cases endanger the comfort and lives of their patients, therefore be it

RESOLVED by the Larimer County Medical Society, in regular meeting assembled, that we hereby protest against the passage of this bill in its present form and request the Author of the Bill and the Members of the United States Senate to amend it so that the final clause of section 4 will read as follows, viz.: "But nothing contained in this section shall apply to licensed practitioners actively engaged in medical practice, to veterinarians, to public hospitals or to scientific or public institutions," and be it further

RESOLVED, That copies of these resolutions be sent to our United States Senators and Members in Congress and that they be requested to use every honorable means to have the bill amended as above indicated.

E. STUVER,
Secretary.

It is to be hoped that many other societies will take similar action, and physicians should, individually as well as collectively, demand that this bill be so modified that the rights of physicians may not be interfered with.

THERMAL MEDICATION WITH HYPERTHERMINE (L'AMBRINE)

Dr. Barthe de Sandfort of Paris has published (in *La Revue de Pathologie Comparée*, Jan., 1908) a paper on hyperthermal medication. He obtains his means of applying high degrees of heat from a mixture of various kinds of water and resins (keroresin) to which he has given the name of "hyperthermine." This mixture, which is solid in its cold state, becomes fluid when subjected to heat, either direct or in a water-bath, and it can be applied like an epithem or by spraying it like water on the parts.

Hyperthermine is characterized by three distinct properties: (1) It is tolerated without causing changes, at temperatures varying between 180° and 220°F., according to whether it is applied to the corium or not. (2) It keeps up the temperature of the application at a much higher degree and for an infinitely longer time than anything observed before. (3) It contracts in cooling; and it is this property, by far the most in-

teresting, which gives it a unique place, and really constitutes the originality of the method.

By the application of hyperthermine we obtain the action of great heat combined with the advantages of a slow, gentle, uniformly progressive compression, the mechanical importance of which in articular, glandular, testicular, and especially phlebitic and varicose engorgement is evident. Thus hyperthermine is a physico-mechanical means to obtain automatically (by elevated temperature) complete asepsis, cleansing and regularity of scars, without any intervention on the part of the operator.

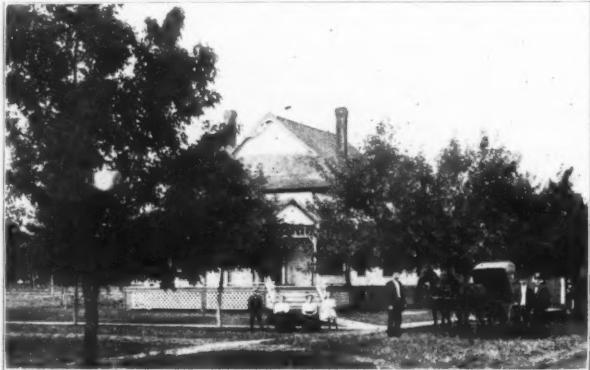
Hyperthermine will give valuable aid to the physician, the surgeon and the veterinarian. In fact the field is so large that we can perfectly understand the suspicion with which it is sometimes received. If, however, it is looked upon not as a medicament, as it does not contain any medicinal substance whatever, but as a vehicle of heat and as a mechanical means of compression and disinfection, it represents a purely physical agent, and as such its use should not be confined to narrow limits. Heat has always been applied by physicians, surgeons and veterinarians. Hyperthermine offers a new method of localizing intense and painless heat in an affected region, and it does not affect its value that this agent can be used for a variety of purposes, so long as it is practically useful and applicable in all possible conditions.

It may be mentioned that hyperthermine has been known in France, for the past ten years, as l'ambrine, and the original French literature refers to the product under the latter name. As hyperthermine has a definite meaning, the remedial agent will be known in this country only as hyperthermine. It is manufactured in France, and the Thermo-Chemicals Company, 6 Cliff Street,

New York, is the exclusive selling agent for the United States, Canada and Mexico.

"STILL RUNNING THE RACE"

I feel I ought to write you; in fact, I've got to—can't hold in any longer. I have been a reader of *THE CLINIC* since 1899, and have never in all that time said boo—or anything else—about the splendid bills of



Dr. Field's Home and the Doctor Himself

fare I have waded through regularly; but I've done an awful pile of thinking, and don't you forget it.

I came down here three years ago from Chicago—wanted more room, you know—more air space—more real hard work; you can always find that in the country, and you can see from the enclosed photo just about what has happened during that time. Thanks to the alkaloids. They have done more for me than any other tool that I possess, and *CLINICAL MEDICINE* has "backed up" behind them. I feel pretty safe and worry less. Confound it, there's no excuse for me not writing you before, and there's no use for me to mention any either, for you know they're all in the dictionary. I just want to say, though—I have not forgotten the time when I used to lecture my class of juniors and seniors. How I would tell them now of the wonders of calcidin and saline laxative, glonoin, etc.

Well, Doctor, if you never hear from me again, you will know and can be fully assured: "I am still running the race."

ALBERT FIELD.

Stonington, Ill.

[Ah! This stirs my corpuscles! Here is a stimulus as exhilarating as wine, serving to keep our activities, for the doctor, at the very highest point.—ED.]

SOUR MILK VS. SAUERKRAUT

I have been interested in the ideas advanced by Metchnikoff as to the effect of sour milk on auto intoxication from putrefaction of the contents of the large intestine; and it has occurred to me that it would be well to consider sauerkraut in this connection.

Cabbage rots easily enough under certain conditions, but, once the souring process is well established, it will keep a long time without spoiling. So here we have germs that are inimical to the putrefaction bacteria. I am not in a position to make investigation, but just offer this suggestion in the hope that someone will experiment and give us the result of his researches.

W. H. CHARLESWORTH.

Tennessee Ridge, Tenn.

[Here's an idea. Metchnikoff, however, advocated the use of the Bulgarian sour-milk, produced by a peculiar germ, more decided in its effects, more inimical to disease-germs than the ordinary lactic-acid organism.—ED.]

OUR JUNE NUMBER—TUBERCULOSIS

For the June number of *THE AMERICAN JOURNAL OF CLINICAL MEDICINE* we have planned what is, rather incorrectly, called a *symposium* on tuberculosis (incorrectly, because the word, from *syn*, with; and *pino*, to drink or to "tank up," means a drinking bout in which songs are sung and a joyous time prevails). However, in accordance with usage we make use of the term. Our symposium on tuberculosis will

contain many valuable and important contributions on the etiology, pathology and treatment of the great white plague, which constitutes one of the most burning questions of the day. We have a promise, among others, from Dr. S. Adolphus Knopf of a paper on the "Prevention of Tuberculosis;" another paper, from Dr. A. S. Ashmead, on "Climatic Treatment," is already in our hands. Dr. E. P. Ward will write on the use of nuclein intravenously, Dr. George H. Candler on medicinal treatment, Dr. H. J. Achard on the specific treatment. Other interesting papers are promised.

But in accordance with our policy of asking the "family" to contribute largely from their wide experience, on the questions which we discuss, we want all our readers to chip in. Sit down today. It's *you* I mean, doctor, and you, and you. Look over the questions appended to this announcement, and tell us what you think concerning the problems, and what you know about them. If you have any interesting point to make on the disease, which is not included in the questions, write it up. Give us short, snappy little articles, full of vim and helpfulness. Do it right away, and let us have your papers by the tenth of the month. The preparation of *CLINICAL MEDICINE* takes lots of time, and we must go to press as early in the month as we can get the material. Now, get busy, and reply especially to the practical questions. The theoretical ones have only an academic value.

1. What is the danger of acquiring tuberculosis from the milk of tuberculous cattle, (a) for adults and (b) for children?
2. What is the influence of heredity in the causation of tuberculosis?
3. Of what practical importance is the laboratory diagnosis and control of consumptives for their treatment?
4. Consumptives are often said to be sexually inclined, more so than normal persons. What is your experience in this matter?
5. Consumptives are accused of being selfish, and mentally unstable. What is your experience in this respect?

6. The drug-treatment of tuberculosis you have found most useful: (a) tonic, (b) symptomatic, (c) antiseptic, (d) anti-toxic.

7. The dietetic management of tuberculous patients. Give your opinion regarding the value of feeding, overfeeding, the use of fats, especially codliver oil, etc.

8. What advice would you give a consumptive patient concerning the home-care of his disease?

9. What consumptives are to be sent from home for climatic treatment? What considerations enter into the question of selecting a climate?

10. What is the influence of altitude on consumption; what the influence of the marine climate?

11. What, if any, is the danger to the general health of health resorts from consumptives congregating in them?

12. What precautions do you order your consumptive patients to take in order to protect their families and associates from infection?

13. What precautions do you take to protect the children of consumptives from infection?

14. What is the physician's relation and his duty to the sociological aspect of the tuberculosis question?

15. Will you give an outline of the general prophylactic and hygienic regulations necessary to diminish the frequency of tuberculosis?

CLAY EATING EXTRAORDINARY

In the March number of CLINICAL MEDICINE I read with interest the article on the "Internal use of Powdered Kaolin," copied from the *Muenchener Medizinische Wochenschrift*.

It reminds me of an experience I once had in the case of two children, aged, respectively, four and six years.

Some workmen, while digging ditches to drain some bog land, came upon a layer of kaolin—sweet clay—covering a bed of hardpan. These children, seeing the workmen tasting the kaolin, and hearing them remark

upon its sweet taste, followed suit, and swallowed large quantities of it, the result of which was that their "inards," to use a vulgar expression, soon became as stiff as ram rods, and required prompt medical attention.

On my arrival at their home, and on being informed of their trouble, I must confess that for the nonce I was nonplussed as to the proper course of treatment to pursue. Recognizing the force of the adage that "delays are dangerous," I resorted to an immediate attack of the enemy in front and rear, and both ends of the line, with warm sweet-oil, with satisfactory results. They recovered, all right, but lost their taste for kaolin!

GEO. D. STANTON.

Stonington, Conn.

A PERIL TO THE SICK

A man falls grievously ill, his physician is called, the doctor writes a prescription for a drug or combination of drugs, which is sent to the drugstore to be compounded. Two-thirds of the drugs in use today in most drugstores are of no standard of strength, quality or purity. The federal drug law has no jurisdiction over them. It cannot punish the chemist who supplies the impure and inert article or provide for their inspection according to an unvarying and practical standard. Were it not better that such worthless drugs, prescribed to save life, should never be administered?

The *Pharmaceutical Era*, of Dec. 23, 1909, in an article by Mr. Henry A. Cary, contains an indictment of the Federal Pure Drugs Law, on which Representative Condry bases his bill, H. R. 13859, requiring that the United States Government shall edit and publish yearly the United States Pharmacopeia, and National Formulary, and have a complete test for purity and strength of all drugs and chemicals marketed as medicines. According to the present provision of the Statute no drug is subject to restrictions of any kind unless it bears a name recognized in the United States Pharmacopeia, a compilation prepared a

decade ago, and lacking the names, according to Mr. Cary's statement, of two-thirds of the drugs that are daily prescribed by physicians. Moreover it is within the discretion of the board of editors of the Pharmacopeia (not a government board) to withhold a standard from any drug now marketed or to change its standard without warning.

In the intervals of ten to fifteen years between two successive editions of the Pharmacopeia the science of making medicinal drugs may be revolutionized, yet may have no official recognition. One rule under the statute provides that a drug bearing a name in the United States Pharmacopeia or National Formulary and branded to show a different standard of strength, quality or purity shall not be regarded as adulterated if it conforms to its declared standard. That means that a doctor may write a prescription according to the standards of the Formulary and the druggist may fill the prescription from bottles that declare a different standard of strength, quality or purity. Mr. Cary is a responsible manufacturer, and as many of us know, the charges are by no means overdrawn, and they reveal a condition of the trade in medicinal drugs that is alarming, horrifying and essentially and despicably criminal.

If such conditions are allowed to continue, what has the editor and assistants who edit and revise the present Pharmacopeia to say in defence of this system, to put a premium upon the sale of impure, inert and worthless drugs? Is it any wonder that honest physicians, who desire only the best for their patients, are so skeptical in sending their prescriptions to the drugstore that a majority are now supplying their own drugs.

Far be it from me to accuse all druggists. I have many a friend in the drug business who I am sure would not supply an inferior drug or even substitute one for another, and if a doctor has such a man in his neighborhood, by all means he should be recommended and supported. But unfortunately there are many who are absolutely unreliable and for those of you who seek the best it is often necessary to supply your own drugs, not only for your patients' pro-

tection, but for your own, for if you give your patient an inferior or inert drug you will surely not secure the results you expect, and in that case your patient may think that you are not doing him or her any good, whereas the trouble is entirely due to the inert drug.

If you buy your drugs from a reliable manufacturer, one who stands by you and backs you up, changing goods if you find them not as represented, and doing all he can for the benefit of the medical profession, you may be assured you will get results that are lasting, and will (by the rapid cure and relief of your patients, due to reliable and pure drugs) make you known about town as "the man who gets results." As results mean increased business, so increased business means more money for the doctor, therefore, Brother Doctor, send to any reliable drug house and have yourself supplied with a list of every-day remedies that you may supply your own patients, and get better results, better success, better business and a better bank account.

Dr. George C. Dieckman, who by the way is a druggist, and secretary of the New York College of Pharmacy, said that there was more danger from the dispensing physicians giving inferior and inert drugs than there was from the druggist. He claimed that the dispensing physician treated the patients according to the drugs he had on hand, and did not treat the disease with the drugs required in the case, thereby reflecting upon the honesty and ability of the doctor.

In defense of the doctor, Mr. Henry A. Cary, has the following to say:

"Mr. Dieckman's statements about the danger from the dispensing physician seem to express disparagement of the medical profession, and he volunteers to tell the physician what he should do as a therapist. It seems to me that Dr. Dieckman, speaking as a pharmacist, is going dangerously out of the way to interfere with the physician's business. As a matter of fact, what he says is an evasion of the fundamental question, 'Shall there be one standard for all agents used as medicaments?' He therefore tries to deflect the public's thought from the single

and simple issue"—the sick man's right to pure, unadulterated, and reliable drugs.

Again, I say, that for the protection of the physician and his patient, it is absolutely necessary for him to have a reliable and honest druggist to put up his prescriptions with pure and reliable drugs, one who does not substitute, as many do, but always gives what is called for. If such a druggist is not available, it is up to the doctor to do his own dispensing, buying his drugs from a reliable drug house, especially a house that stands by the doctor in every issue that comes up, and fights his battles.

Mr. Cary quotes the following from the Bureau of Chemistry at Washington, a statement of Dr. Wiley: "Out of 1220 samples of imported drugs analyzed in the past year, 705 were below the standard, or in other words, represented violations of the law."

W. F. RADUE.

Union Hill, N. J.

ON CLEANING OUT

Someone has said that there is a funny side to everything for those who can see it. Maybe this is true. One thing I do know, and that is that I have learned many useful medical facts outside of the medical profession. My worries are lessened many times by what the poor widow woman with a large family of small children to support said to me: When things were good for her she was glad and when they were the reverse she was also glad that they were no worse. So you see she was glad, no matter how things went.

Many years ago I got an idea from a scrapper that has served me well many times since, professionally. He would rather fight than eat. He would leave the table any time to mix in with a fight, no matter what kind, whether gun-play, knife-, slash or fisticuff—it was all the same to him. And he always came out winner.

I asked him how it come that he was so successful and he said that the best time to begin a fight was in the beginning of it. "If I can get two or three bullets into the other fellow," he said, "before he realizes

that the fight has commenced; I have much the advantage of him after this in that fight. Here's the whole secret of my success—I land first!"

Why isn't that a good idea in our fight with disease. Get there first; "land," as it were; give a solar-plexus blow, and many times you have it down and out before it really gets much of a hold.

Assisting nature is all right, but it must be done "with a club," so to speak, many times, to obtain the best and quickest results. To illustrate what I mean I will explain how the get-there-with-a-big-stick worked with the big engineer who was taken violently sick with a very severe pain in his abdomen. Being a railroad man the company surgeon was called in. He gave his patient a hypodermic injection, pronounced the trouble acute appendicitis and made arrangements to move the man to the hospital the following morning for an operation.

During the evening, when the effect of the morphine was gone, the pain returned in all its severity. Being unable to get the company surgeon I was called in to give relief temporarily, as he said they were going to take him to the hospital the following morning to be operated on. I gave him the injection as he requested, but did not stop there. I also gave him about 30 grains of calomel, followed every two hours thereafter with one tablespoonful of saline laxative in one glass of warm water till bowels commenced to move. Called the following morning and found him upon the chamber. When asked if his bowels had moved, he replied that they had "done nothing else for the last two or three hours." He had filled the chamber about half a dozen times. The pain was gone.

They did not take him to the hospital and he was back on his job in three or four days, all right.

It may be all right to operate on such cases, but I hardly think so. Neither do I think it best to lose from twelve to twenty-four hours to "clean out" as would necessarily follow where 1-10 grain of calomel was given every hour for ten or twelve hours, then the saline. There's too much valuable time lost.

When I am called to see a patient and suspect that the alimentary canal, and the whole system for that matter, is loaded up with from one to four gallons of decomposing, microbe-forming sewage, I clean it out thoroughly and in short order by giving doses large enough to do this—20 grains to 30 grains of calomel at one dose, followed every two hours thereafter with a glass of warm saline solution till not only the bowels but the whole system is washed out.

When this is done more than half of the battle is won, and the patient's system is in a condition to assimilate such remedies as are necessary to finish up the case.

M. E. JOHNSON.

Pittsburg, Kan.

[You are eternally right, and your little paper might be regarded as a classic. Even your big dose of calomel was right in that case, though it is *very* rarely indicated. The only fault I find with your course is that you did not charge the man what he would have had to pay for an operation, adding 50 percent for saving him time and suffering, and avoiding danger.

Just to show that more than one road leads to success, I will add that Burggraeve cured similar cases by pushing to full effect hyoscyamine and strychnine—the one to relax spasm of the circular intestinal fibers, the other to stimulate the longitudinal fibers and arouse peristalsis. Also, some success has followed enemas of kerosene to break up the impacted fecal masses.—ED.]

GRAVES' DISEASE—RESULTS

While many physicians have uniformly poor results with internal medication and decry anything but surgery as curative, yet in the dozen or more cases that I have treated with remedies the results have been so favorable that I contribute this in the hope that some one else will be encouraged to persist with his remedies and thereby relieve some poor suffering woman as well as to increase his faith in active potent remedies. The case reported is the most severe that it has been my privilege to treat.

While on a hunting trip in September, 1908, word was left at the place where I was stopping for me to call at a certain residence that evening when I returned to town. I found a lady of 42 with so clearly marked a case of exophthalmos that I could hardly see why any third-year student could miss the diagnosis; yet four good men had failed to diagnose it as such. She had all three cardinal symptoms in a marked degree; exophthalmos, tachycardia and enlarged gland. She could hardly walk across the floor on account of weakness and palpitation. I could not find any cactin in town and not having my case along, I used some cactina pellets until I could get home and send my remedies.

In all my other cases there has not been the extreme anemia and tachycardia present, and I have found lycopus to be sufficient. Now, there have been reports of failure with lycopus virg., mainly, I believe, because a reliable preparation has not been used. I have used other preparations, but have found that the mother tincture prepared by Boericke & Tafel, given in 5-drop doses four times a day, the only one that gave results. Try it, brethren.

Now back to my case; I put her on lycopus and cactin, gr. 1-67 every three hours, until the tachycardia was under control, and then I prescribed the arsenates of iron, quinine and strychnine, to be taken after meals.

There was immediate and constant improvement, and in February, 1909, she was discharged as cured, with all symptoms gone except some prominence of the eyes, which I think due to a previous severe attack during early married life, in which rupture of the cornea was feared. I wish to impress upon all readers the necessity of using dependable remedies. They cost a little more, but how you can smile when you get results. I, for one, cannot afford to take chances.

H. M. HOLVERSON.

Boise, Idaho.

[Right you are, Brother! We hope many of our readers will try your method of treatment and report results. Cactin we know is "A-1" for the functional heart dis-

turbance, and the lycopus (or lycopin) deserves trial.—ED.

HOW TO GET YOUR SHARE OF BUSINESS

The December JOURNAL OF CLINICAL MEDICINE (p. 1351) has an article on "How to Get Your Share of Business." As this question is an ever-present one, bobbing up in various guises and fraught with much practical interest to all of us, I ask the journal to allow me to say a few commonplace things which may help to form proper conclusions in the solution of this vexed problem. In order to treat of a subject, however, we must first understand that subject in its details and then clear away the rubbish of prejudice, of self-interest and conventionalism which are sometimes enthroned in the place of Love, Truth and Justice.

The first query that arises is, What is the medical profession; what is any profession or calling? The answer to this question is very relevant and material and upon it will depend whatever of suggestions for betterment we shall be able to offer.

Is the medical profession a unit, a whole in itself, or is it a part of a greater unit or whole which, when taken apart, injures if it does not destroy both? I think the question is in itself enough to show any fair mind that we are but a part of the great body politic, and in order to know our functions we must study the organization of that body and must abide in it as the branch abides in the vine. We can no more promote the growth and development of our profession at the expense of organized society than the branch can grow apart from the vine.

Flowing from these primal truths there follows first a common interest, linking together every trade, calling and business into one common brotherhood, making the interest of each the weal of all, so that as long as harmony prevails, good ensues, while the very first discordant note reverberates in rebellious lay.

Now let us consider, in the light of these premises, some of the ills we complain of.

What do the professions and trades owe to the great mass of humanity in which their destinies are cast? Answer: They should conserve their true and full interests in their respective lines. What, on the other hand, is due them? Full and ample support, measured by the interests of all concerned.

Remember, the highest authority, the court of last resort is the "genus homo." With his constitution of civilization man reigns supreme and every individual is a sovereign; hence to get his cooperation his sovereignty must be recognized. Many subdivisions into professions, trades, callings are formed for the better carrying on of the purposes and objects of this great compound unit, Society, but none are clothed with an authority commensurate with that of the parent body. Therefore, when one subdivision enacts rules and regulations, such laws can apply only to that division enacting them, and not to another or to the whole. Any question involving the sovereignty of another must be fixed by diplomacy.

If I have not misconstrued plain evidences, it is the violation of these evident truths that has led to trouble in the medical profession. We are the servants, not the masters of the people; nevertheless we have undertaken to rule beyond our authority. The result has been antagonism all-round. The self-complacent and authority-loving have erected barriers which drive the people from us, and in their wanderings they have met the patent-fake and the proprietary charlatan.

It seems to me that medical ethics ought to be a very commonsense arrangement, allowing such departures as are shown to be honorable.

The tendency to leave the poor to public charity is not only taking that much from us, but also much of the remainder which pays—we should do all the work and induce the public to help in it; by so doing we should regain lost prestige.

We should quit legislating about fees. The public will never cease to sit in judgment upon what they have to pay, and it is right they should. The doctor and the patient in a given case know better how much the latter is able to pay than any other mortal.

The doctor has the services with all that this means, and the other fellow has the money to pay for them. They want to exchange, and who will say that it doesn't take two to make a bargain.

Let me illustrate this principle in another way. This is an age of combination. Soulless corporations are reaching out to control every conceivable source of man's supplies. Suppose such a power should take hold of the medical profession for the avowed purpose of curtailing the number seeking to enter upon its duties and of selecting from this list certain medical practitioners who alone might be employed, would it avail the combination thus to close the ranks and to make use of its power to enforce its mandates upon an unwilling people?

Let the tokens of disintegration now apparent in most trust companies speak. I verily believe the doom of all soulless corporations is at hand, the potential arm of the people's power is raised to strike. Let us not at this late day incur its displeasure, rather let us seek that more enduring relation with our fellow man which takes him by the hand and in glorious fellowship leads him in the paths of peace while we grow in the confidence thus built up.

Medical societies are all right as other trade organizations are right. The field of their influence is wide for the elevation of the standard of membership, and in many ways for urging the members on to higher attainments. But no pressure or force exerted by societies will ever enable a profession to override the public will when this is founded on justice.

Therefore all organizations for the control of human action must recognize the right of appeal which limits them to the bounds of truth and justice. Professional ethics are wholesome and necessary, but if proscriptive and unjust, they give cause for appeal and reversal. By these principles, so imperfectly set forth, the true relations of the professions to the great master they serve are and will be restored; the autonomy maintained, every jarring discord eliminated, and merit rewarded. This is, at least, the truth as I see it.

As to the matter of which "Incog." writes, "How shall each obtain his share of business?" By the plan outlined above we hope to avoid all obstructing laws and customs, affording equal chance for each and every one to begin that individual effort which must henceforth determine the end. No two will end alike. No advertising, trickery or scheming can fill the place where only merit wins.

R. I. MCQUIDDY.

Lawrenceburg, Ky.

[There is much truth in what Dr. McQuiddy says. When we read his letters or those of other friends who have rounded out their lives in doing good to their fellow men in our beautiful and grand calling, we feel like the Spartan youths of old, of whom history tells that they used to sit with the old men in the market place and listen to their wisdom. Times have changed, and the wisdom of the aged is not always deferred to as much as might be. Yet we are glad indeed to hear and learn from the "fathers" in the profession and are glad to listen to their experiences and counsel. The Doctor's words give food for thought, and they may well be remembered.—Ed.]

SUNLIGHT AND DISEASE

It is well known how large is the significance of light in the development of all organisms. The skin especially is subject to this influence. The exposed skin-surface is far more sensitive than the covered portion, and more so when it is diseased.

Experience has taught that cases of variola treated in semidarkness are much milder than when treated in full daylight. Where daylight is excluded and lamp or candle light substituted the formation of pimples and vesicles remains stationary, the skin never becomes inflamed and the pustules never suppurate. There never are heavy pains and even the itching is but very little. The earlier the room is darkened, the better the results. But even a short exposure to light might bring undesirable results in the stadium of eruption. Dr. Walters of London

describes, in *The Lancet*, a case of variola, where one of his patients felt so well on the fourth day that she wanted to read a newspaper. In order to make light, the curtains were drawn and sunlight was let in. After a few hours there was high fever and pain. The pox became confluent, and although finally cured, the face was disfigured by the pits.

One of my patients was confined in a room with terra-cotta-colored shades. She became restless, nervous, and suffered with conjunctivitis. She attributed these symptoms to the red color of the shades. I ordered blue-colored ones, and from the very moment these were used her nervousness was gone, sleep was normal, and the inflamed eyelids improved.

It is old news that blue color acts favorably upon the nervous system, but it has another advantage. Through an unpardonable error a window was left open without a screen. In less than no time the house was full of flies; some of the windows were just black with them. But they did not remain in the room with the blue shades. I was reminded of this when I read an article about the experience of Paul Fé, a farmer of St. Cyr, France, who had in his stables 170 cows. He observed that flies dislike intensely the blue color. He covered the walls of his stables with a sky-blue calcimine and the success was surprising—no flies remained in the place.

In one of the socalled sweatshops of Detroit were two large rooms, each occupied by about twenty "victims." In one room, which had red walls, there was continual quarreling, while in the other, a blue-papered room, peace ruled. I called the boss's attention to this difference in color, suggesting it as the probable cause of this peculiar condition. And true, as soon as he had the other room papered blue the quarrels stopped.

The insane asylum at Delft, Holland, is called Blauwhuis, i. e., Blue House. The interior decoration of this institution is mostly blue, and intentionally so. Cobalt-blue spectacles are sometimes sufficient to quiet nervousness. In our daily practice

there is room galore for a fair trial of this suggestion.

D. ZWIGTMAN.

Niles, Mich.

[This may appear strange, but come to think it over, I believe the doctor is right. Suppose the readers of CLINICAL MEDICINE try the suggestions and report.—ED.]

MEDICAL STUDENTS COME TO SEE US

As will be seen, we are printing in this number several groups of medical students, representing the graduating classes of several colleges. The seniors from several of the Chicago medical schools have been coming to see us. They find many things about our plant which are of peculiar interest to the young man just entering in life. We make it a point to show our visitors, first, just how an up-to-date magazine is produced in this day of automatic printing machinery, with its monotype and linotype composition, automatic feeding and "rapid-fire" presses, folding, gathering and stitching machinery, electrotype work—everything in fact necessary in a thoroughly modern printing establishment.

Across the way from our printing plant is the great laboratory of The Abbott Alkaloidal Company, and that is of course of intense interest to the young men, who (having to give medicines when they get out into practice) should know something about how medicines are prepared and placed upon the market. Such a trip is a little therapeutic education in itself—or at least so the boys seem to regard it.

These visits all wind up with a "feed." Ah! That's the way to a healthy man's heart. And these boys, full as they are of red blood, enjoy this part of the entertainment, as well as the music, the inspiring talks by members of their faculties and others, and the stereopticon slides, which lend pictorial interest to every such occasion.

We also enjoy the visits. Would that we could have every young graduate in the country with us at this season. Can't some of you boys from outside of the city drop in anyhow?



CLINICAL MEDICINE POST-GRADUATE SCHOOL OF THERAPEUTICS

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PART III.—LESSON EIGHT

BRONCHIAL ASTHMA

INTRODUCTION

The true bronchial asthma, sometimes designated spasmodic or nervous asthma, to distinguish it from cardiac or renal asthma, is what will be discussed in this lesson.

Etiology.—This is usually a reflex condition from nasal or nasopharyngeal disease, rhinitis, tonsillar hypertrophy or adenoids; occasionally resulting from pressure on the vagus by thyroid enlargement, tumors or enlarged bronchial glands, due to tuberculosis, measles, pertussis or rickets. It may also result from a toxic condition produced by lead, mercury, uremia or in connection with gout.

The affection occurs especially in weakly, anemic, nervous, scrofulous and rachitic subjects.

Sixty-six percent of the cases occur in males between the ages of twenty and forty years.

Sputum.—There is no sputum during the paroxysm, but at the end of the attack there usually is voided a small amount of tenacious sputum resembling egg-albumen. This contains many minute gray balls (*perles de Laennec*); when unrolled these are seen to be the spirals of Leyden, Ungar and Cursch-

mann. They are best seen with the naked eye.

Many yellow drops are also present. These are the Charcot-Leyden crystals. They are pointed octohedral crystals consisting of an organic base with phosphoric acid and are derived from the eosinophile leukocytes.

The sputum also contains many alveolar and epithelial cells, and most of the leukocytes are eosinophiles.

Blood.—During the paroxysm and for a very short time before and after, the blood contains an increased percentage of eosinophiles, averaging from 6 to 50 percent of all the leukocytes. This condition does not occur in asthma from other causes, but only in the true bronchial asthma.

THE TREATMENT OF BRONCHIAL ASTHMA

In giving the treatment of asthma I cannot do better than quote from James F. Goodhart, who says:

Asthma a Paroxysmal Neurosis.—“It seems impossible to doubt that asthma is one of those nervous actions of which we see so many examples in our economy, and

which have been well called paroxysmal neuroses. Epilepsy is one of these; some forms of insanity are others; migraine is another; asthma is another, and so on. Now all these more or less obey this law, that the more they come the more they may. Nervous actions which in their essence and initiation are not abnormal, by excess of energy or of frequency, or of both, become abnormal; and ultimately is much of habit in the intractability of the disease; and if control is to be gained over either, it must be by catching it in the earlier days of its appearance, and by arresting it before it becomes confirmed. We sometimes think that we can gain some control over the convulsions of infancy; we can perhaps keep them at bay sometimes, and so stop the child from becoming epileptic. But what case is more hopeless than that of the confirmed epileptic, even though he be persistently stupefied with bromides?"

The case of asthma is a parallel one. It has been contended that it is a disease rather of childhood than of adult age; and that to pay attention to this fact, and to the suggestions that flow therefrom, offers the best-possible chance of stopping the attack and of preventing the fixation of the habit and the establishment of chronic asthma. The chronic asthmatic is almost as hard to cope with as the chronic epileptic.

There are two Methods of dealing with the asthmatic. On the one hand, we may attempt to make the environment of the patient conform to the conditions required by the individual; or, on the other hand, to harden the individual, to widen his range of accommodation, and so to make him less susceptible. In the matter of drugs somewhat similar alternatives present themselves. We may either give sedatives to the oversensitive nerve-structures concerned, or give drugs, if such there be, to raise the level of nervous action to that higher platform that shall enable the perceptive centers to take less heed of their unnatural worries.

Palliatives take Precedence.—But the asthmatic paroxysm is so distressing that almost always the treatment of it usurps the first place; and too often this urgency of

the situation upsets the perspective. If we are called to a patient in the stress of a paroxysm of asthma, clearly, on all accounts, it must be arrested as quickly as may be; there is no time to be very careful and consistent about ways and means.

Thus the quickest way to relieve a paroxysm of asthma is to make the patient inhale some fume or other, as of saltpeter, nitrite of amyl or chloroform; or else to give him an injection of morphine or a dose of chloral. Indeed, as we all know very well, doctors see paroxysms of this kind less often because various patent powders for creating fumes held the field so largely that most people do without us and stick to their patent remedy.

Thus the treatment of asthma too often becomes the repeated sacrifice to the paroxysms; and the patient drags along, thankful for the small mercy of temporary freedom from its troubles, and easy in mind if he can carry in his pocket protection from those that are to come.

The Danger of Temporizing.—But this plan of campaign is ultimately a most disastrous one. It unquestionably produces temporary ease; but what happens afterward is this:

The vapor, on reaching the mucous membrane, stupefies or exhausts the nervous centers, and stops the spasm for a time. But at the same time some of these remedies, by stimulating the mucous membrane and provoking the flow of mucus, make the local erythema rather worse than it was before. The more sedative kinds of inhalations do but appease by offering bribes to vicious nervous influences. By and by the nervous centers wake up again to find matters no better, but rather the contrary. And then on comes the spasm again, and the whole process is repeated; and, with each repetition of the cycle, the nervous centers, as their nature is, become more exhausted or more irritable, their sleep is shorter, their spasm is more and more quickly repeated, and the poor patient ultimately lands himself, with perhaps some lessening of severity of each paroxysm, in a more prolonged or persistent stiffness hardly less distressing

to bear. All day long he appeals to his powder, and in fact becomes the slave of an appetite that he has whetted and that he cannot now control. Thus ends the chronic asthmatic who betakes himself to vapors.

But this is not all, for by common consent a repeated application to some of these drugs, whether by making matters worse in the lungs or by worrying the cardiac ganglia, or what not, tends to dilation of the heart, and is equivalent to a good many nails in the coffin of the asthmatic. Moreover, this dread of the paroxysm itself is carried into the preventive treatment of the disease, and the patient is submitted to what may be called the "glass-case" treatment; that is to say, the temperament of the patient is ignored or not considered of importance, and the disease is supposed to be brought on by chill. If he be wealthy and adventurous, he fights his environment by running away; and thus he may, perhaps, get along pretty well.

Beware of the "Hot House" Treatment.—If the patient be a child, it is probably kept indoors, except in the finest of summer weather; yet, nevertheless, the history too often is that "it has caught another chill"—but no one can say how. At first, perhaps, the child had the whole house to roam about in, but as the "colds" recur, it is confined to one room with a south aspect; and yet things do not mend. So the doors of the room are carefully screened, the windows perhaps pasted up, and still the success not being all that is desired, extra clothing may be piled on. And ultimately the doctor finds hidden somewhere under this heap of precautions a pale, flabby, moist, steamy thing, with big eyes, thin cheeks, protruding ribs, and a more or less general bronchitis; a case of "successful" management, because no attack has occurred for some weeks! But is this to be called success? This is to nurse the powers into imbecility; and the inevitable result is, that the first time the patient puts his head outside the door a fresh cold is "caught," and a fresh term of imprisonment is ordered. I venture to say that if asthma is to

be prevented at all, it will never be kept at bay by such hot-house treatment as this.

Importance of Climate.—Unfortunately, it is easy to utter destructive criticisms of this sort but difficult to point to a better way. I think there can be no doubt that the first requirement for the asthmatic is to put him into a climate in which the sufferer can be much out in the air. But here is a difficulty; we know so little about climate; and asthma is so individual a disease. No one can foresee in a particular case whether this place or that will prove suitable; and, when the issue is doubtful, experiments in moving invalids about are never likely to be made with any great thoroughness.

Nevertheless, for most victims of asthma there generally can be found for each some particular localities where he feels more comfortable or even free from attacks. There he should be sent, at least for a time. This place may be at the sea, it may be inland; sometimes it is a dry place, sometimes a humid one; often even it is a large town. In many instances it is the air of cities that cures, and that kind seems to be best which is the most typical, namely, the most dense and smoke-filled. But wherever it be, the patient should be out and about with very little restriction; thus rendering the morbid circuit less prone to discharge. Of games and sports, all that are outdoor and healthful and invigorating should be encouraged.

The Dietetic Regimen.—In the matter of diet it is necessary to be careful, but not too much so. It is a very easy thing to prescribe numerous restrictions about food, and thus only make matters worse. Yet, an attack of asthma certainly often does seem to start from a meal that has not been digested—one which may have been too large, of an improper character, or taken at some irregular hour.

The points to aim at are good, plain, light food, in moderate quantity and slowly ingested. The asthmatic, particularly children, often are deprived of potatoes, starchy puddings, jam and sugar, and goodness knows what else, and on the other hand are put on various meat juices and other good

things in the wrong place, so as to remove all rocks of offense from the path of their pneumogastrics. But, "if these things are done in the green tree," what is to be done in the dry? What chance has such a child of reaching old age?

Any food that is plain and wholesome and known not to disagree may be allowed. It is a good plan to have the chief meal early in the day, when digestion is vigorous; therefore breakfast, lunch—an early dinner—should be the main meals; anything taken later must be small in quantity and of the most digestible kind. All meals for the asthmatic should be small ones. The stomach should never be distended.

The diet is frequently an important element in the successful treatment of these cases. Indiscreet and inappropriate diet often induces paroxysms, small meals of digestible foods being best. Many idiosyncrasies are met with respecting tolerance or intolerance of certain articles of diet. I have known fresh butter to be every time and immediately provocative of an attack. Hard meats, cheese, pastry, beer, and ill-cooked food generally are inadmissible. Full evening meals are to be avoided, and the chief meal is best taken early in the afternoon.

Furthermore, the bowels should be kept carefully regulated and sufficiently open by taking a saline laxative. Every effort should be made to put the patient in as healthy and physically fit a condition as possible. A tepid or cold bath should be taken in the early morning, and the living room be well ventilated.

These must be the general principles upon which to deal with the asthmatic; and this the more unhesitatingly the younger the patient, and just as soon in the course of the disease as he comes under treatment.

The Drug-Therapy of Asthma.—In considering the treatment by drugs, two divisions of the subject naturally present themselves, namely, those medicines that are useful in preventing asthma, and those that are so when the actual attack is threatening or in progress. Again, a distinction must be made between the cases that seem

to be pure nervous asthma, those in which there is any degree of persistent bronchial catarrh, and those already mentioned, which come on in later life and may not irrationally be attributed, on the one hand, to blood conditions that as a group may for convenience be called gouty, and, on the other, to the degenerative changes in the tissues.

Arsenic as a Preventive.—As a preventive remedy in the pure form of asthma, no drug, in my opinion, is equal or even nearly equal to arsenic. This remedy should be taken for three or four weeks, then omitted, and then resumed after an interval of equal length; and so on for three or four courses. After that the arsenic should, from time to time be resorted to in periods when from any cause the nervous centers begin to show signs of lowered tone.

Management of Bronchial Forms.—In cases where a persistent bronchial catarrh is at the bottom of the trouble, obviously less benefit is to be expected from medicines, in which case the suitable climate promises best. As a rule, such cases do best in dry and bracing air.

The two chief drugs from which much benefit often is derived are strychnine and iodine. The first of these, possibly, as a stimulant to the respiratory center, the other as an expectorant.

For the asthma that occurs in later life an eliminant treatment, on the whole, is the best. It is in such cases that a dose of calomel, perhaps with podophyllin, followed by a saline laxative, in conjunction with careful attention to and restriction of diet, are useful. In these cases, the iodine (as in iodized calcium), perhaps by its influence on blood pressure as well as upon the mucous membrane of the bronchial tract, often will help very considerably.

Asthmatics are much benefited by brine-baths and systematic exercises, such as the course elaborated at Nauheim for the treatment of certain forms of disease of the heart. One can well understand that means of this kind, by stimulating the circulation and facilitating the flow of blood through the lungs, may prove of much service.

To Relieve an Attack, or the semi-asthma that either forebodes and often lingers after an attack, other means must be used.

In the threatening of an attack, or in the dyspnea that lingers when the more acute symptoms have subsided, many drugs have been tried, and at one time or another succeeded. Of these I should put first calx iodata or potassium iodide, and lobelin. Sometimes a combination of potassium iodide and chloral hydrate has been effectual.

At the onset of an attack grindelia robusta is often of great value, given in half-hourly doses until relief has been obtained. The following prescription is very effective:

Ammonii iodidi	dr. 2
Extracti grindeliae robustae	m. 30
Tincturae lobeliae	dr. 1
Tincturae belladonnæ	dr. 1
Syrupi pruni virginianæ	oz. 1
Aquaæ destillatae, q. s. ad.	ozs. 2

Dose: One teaspoonful three times a day.

The inhalation of amyl nitrite at the onset of an attack gives very prompt relief because of its relaxant effect to the bronchial musculature. There is, however, one objection to the use of amyl nitrite, namely, the patient becomes accustomed to it and soon increasing amounts are required until the limit of safety is passed. It is further contraindicated where there is arteriosclerosis of marked type, through danger of rupture of an artery.

An Attack may often be Aborted or Considerably Lessened by taking small, but frequently repeated doses of nitroglycerin (glonoin), say, 1-100 grain, during the premonitory stage or when the patient has engaged in some pursuit that generally gives rise to dyspnea.

The inhalation of spirit of chloroform combined with other antispasmodics may give relief when nothing else will. A combination something like the following may do:

Solutionis magendie	dr. 1
Extracti belladonnæ	m. 30
Spiritus glonoini	m. 30
Spiritus aetheris compositi	dr. 1
Spiritus menthae piperita	dr. 1
Spiritus chloroformi	dr. 1

Directions: Take 20 drops on a lump of sugar.

Again, in some patients nothing so markedly lessens the paroxysm and gives relief as the inhalation of the smoke of cigarettes made from dried grindelia leaves soaked in a saturated solution of potassium nitrate. The following furnishes a serviceable cigarette:

Hyoscyami foliorum	0.60
Belladonnae foliorum	1.2
Stramonii foliorum	1.2
Pruni virginianæ foliorum	0.60
Potassii nitratis	0.60
Aquaæ, q. s., or	15.0

Dissolve the potassium nitrate in the water, moisten the leaves, then roll into ten cigarettes. Of these three or four are to be smoked daily for the relief of dyspnea.

Also, a piece of blotting paper may be soaked in a saturated solution of potassium nitrate and potassium chlorate and burned, the patient inhaling the fumes.

If the paroxysms be so severe as to endanger life, quiet may be secured by a hypodermic injection of the following:

Morphini sulphatis	gr. 1-4
Atropini sulphatis	gr. 1-150
Nitroglycerini	gr. 1-100

A hypodermic injection of hyoscine, morphine and cactin gives immediate relief.

At the same time wrapping the chest in a hot mustard-pack is to be ordered.

GEORGE F. BUTLER.

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ATYPIC ASTHMAS

The designation, "asthma," is loosely applied to dyspeas of every variety. Nevertheless there is reason for not restricting the term to essential asthma, since the dyspnea attending emphysema and cardiac disease is a true spasmodic neurosis, and not explicable by the mechanical condition.

Dyspnea means difficult or accelerated respiration in which there is insufficient oxidation of the blood. (Greene) This may be induced by an obstruction to the respiration, by a loss of pulmonary surface, or by an impairment of the chemical exchanges of the blood. Cyanosis usually

coincides. Tonsillitis, croup, and anything that narrows the lumen of glottis, larynx, trachea or bronchi may cause dyspnea; so also the swelling of the mucous tissues from inflammation or the presence of membranous deposits or foreign bodies may induce dyspnea; but it requires the predominance of the spasmody element to constitute asthma.

Further, there may be some obstruction due to stasis in the pulmonary area, as in case of mitral lesions, when the blood is backed up through the left auricle and the pulmonary veins, engorging the pulmonary capillaries, the pulmonary artery, and finally the right ventricle. This organ, by its powerful efforts, forces the blood through the congested areas and sustains the arterial circulation as long as compensation endures. The one effect of the lesion it does not relieve is the pulmonary engorgement, which, originally passive, becomes active as the ventricle hypertrophies. To some extent the dyspnea is here mechanical, but it often develops a spasmody character and an intensity far greater than the mechanical derangement directly warrants. Moreover, spasmody asthma is a frequent concomitant of cardiac lesions in which pulmonary engorgement is not present.

In Emphysema we have a diminution of pulmonary aerating surface, but the difficulty in oxygenation is here also enhanced by the spasmody element which so frequently develops. This is also the case in fibroid infiltration, while comparatively small tubercular deposits may induce asthmatic seizures out of all proportion to the extent of lung-tissue involved.

Hemoglobin Deficiency.—In maladies involving a loss of hemoglobin the dyspnea is persistent rather than paroxysmal; although here, as in all the forms mentioned exertion is liable to induce the paroxysm. The more marked the spasmody tendency, the slighter the physical effort that will arouse it. We see a patient who, while the asthmatic tendency is acute, cannot speak or attempt to raise the head or swallow without strangling, and, yet, when the asthmatic period has passed over, that same

patient can dance or climb the mountains without the slightest difficulty, although the emphysema or cardiac lesion remains.

Kidney Lesions.—Still more interesting are those cases where typic asthmatic attacks occur in persons whose kidneys are not eliminating sufficiently or whose blood is contaminated with fecal toxins. The asthma may here give warning of an approaching uremia. The form occurring with diabetes, foretelling coma, is known as air-hunger.

Dyspnea may occur upon exertion in chronic bronchitis, in large, latent pleural effusions, in convalescence, and in the obese. With dilated and fatty heart it is persistent, and increases as the circulation fails.

In all these complicated asthmas, when the dyspnea is largely spasmody, although in part dependent on material obstructive lesions, the relaxants are usually ineffectual.

Glonoin gives speedy and certain relief. This may usually be confirmed and maintained by the simultaneous administration of hyoscyamine, pushed just up to the first indication of physiologic effect, in dryness of the mouth or sharpness of speech. To this strychnine arsenate may always be added with advantage. Strychnine arouses the vital forces and brings the reserves into action. The best results are obtained from small doses frequently administered, until the desired effect has been secured; as, for instance, glonoin, 1-4 milligram, hyoscyamine, 1-4 milligram; strychnine arsenate, 1-2 milligram; given together and repeated every ten to thirty minutes till effect. The antispasmody action may be aided by applying mustard or ice over the right pneumogastric nerve in the neck.

The Failures will be those in which there is renal insufficiency and toxemia. If we look on an asthmatic attack as a warning to investigate the kidneys, liver and colon, we shall avoid the too common error of treating the symptom while neglecting to strike at the cause. It is not the loss of a little albumin that matters, but the persistent failure of liver and kidneys to eliminate their

full quota of solids. A daily output of 300 grains of urinary solids in an individual whose normal renal excretion should reach 1200 grains is surely a matter of too vital importance to be neglected. Cases in which an asthma has resisted diverse remedial efforts until accidentally a free catharsis ends the attack are not conducive to the reputation or the self-gratulation of the attending physician.

Climatology.—I am strongly tempted to dismiss the subject of climate with the remark that for each asthmatic the immunizing climate will prove to be that, where the mode of life, the habits, are such as best to keep the bowels open. But nobody has studied the climatology of asthma long without finding the subject beset with difficulties and contradictions. There is no rule—every case constitutes one more exception. When a patient reports freedom at any one place, let that be his home henceforth. Years of freedom do not allay the tendency to returning paroxysms on deserting the place of refuge and returning to the scene of former tortures.

Adrenalin.—I have made little use of adrenalin as a remedy for the relief of the paroxysms, although it has been enthusiastically urged by several of my medical friends, who have found it effective in their own cases. But in the few instances where I have used adrenalin the results have been similar to those following the use of asthma powders, namely, immediate relief, then the dyspnea recurring more and more frequently and severely until all effect seemed to be lost. However, the matter is not to be decided by a few cases, and we may have a remedy of inestimable value in adrenalin.

Further Studies are Needed.—Dr. Otto Lerch of New Orleans has traced a connection between asthma and persistence of the thymus gland, and between asthmatic tendencies and splanchnoptosis. His observations have opened up a new and interesting field for inquiry. They serve to illustrate the wisdom of a maxim of Gross—to treat any abnormality detected, no matter if no connection be traceable between it and the malady present. It also shows the value

of the x-ray and other modern methods in adding to our diagnostic powers.

The remedy indicated in enlarged thymus is ergotin; on splanchnoptosis, berberine.

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PHYSIOTHERAPY IN THE TREATMENT OF ASTHMA

The condition known as asthma is due to contraction of the bronchial muscles. The exciting cause of such contraction is some irritation originating in and emanating from the nervous system. The convenient term "reflex spasm" is used to designate the obscure etiology of asthma. It is needless to say that in these days of exact reasoning in medicine the insufficiency of the above explanation is generally recognized.

Etiology of Asthma.—In many instances the cause of asthma can be clearly isolated and defined. Thus we speak of cardiac asthma, renal asthma, etc. In view of the fact that the asthma in these cases is secondary to disease of the heart, the kidneys, etc., it is called secondary asthma, while the term primary asthma is applied to cases of asthma in which the exciting cause is not apparent and the asthma, therefore, presents itself as a condition *per se*. It is perhaps safe to say that with increased knowledge of the subject and more exact diagnostic analysis of the individual case the number of cases of primary asthma so-called is constantly decreasing. Under the head of secondary asthma we nowadays classify the so-called emphysematous asthma which at one time was recognized as a distinct variety.

The term "nervous irritation" admits of endless application. It may serve as a mantle of ignorance to conceal some form of autointoxication, the asthmatic attack being due to a toxemia affecting a nerve center or a nerve trunk. The vagus is frequently the direct seat of irritation. Sometimes asthma coexists or alternates with other neuroses, such as epilepsy, angina pectoris, etc. Asthma has been traced to the existence of nasal polypi and their interference with

respiratory function. Menstruation has been known to produce attacks of asthma. Even psychic factors are recognized in connection with the etiology of asthma. The relation of asthma to certain metabolic disorders like gout, rheumatism, skin-diseases, etc., is well established.

Find the Cause—In treating a case of asthma it is of fundamental and over-towering importance to find the cause. We are safe in considering asthma a symptom, pure and simple. Treatment, unless we are satisfied with symptomatic relief, depends on the cause and our ability to remove it. Remember that the term "reflex symptom" is reality means nothing unless we are able to connect intelligently the symptom and the underlying cause. The latter is ordinarily one of two varieties, to wit: some form of autointoxication (kidneys, alimentary canal, etc.) or a mechanical irritation (e. g. nasal polypus, passive hyperemia in the lungs, insufficient heart's action, etc.). Adapt your therapy to the cause. Remove the nasal polypus, cure the dilated stomach or the prolapsed bowel, tone up the heart's action, study the therapeutic indications in renal diseases and apply them *pro renata*, relieve gout, rheumatism and other disturbances of metabolism, etc., etc. The asthmatic condition will then take care of itself.

Asthma and Tuberculosis.—It is an interesting fact that persons suffering from asthma hardly ever contract tuberculosis. This is due to the passive congestion of the lungs which is found in cases of asthma. Wherever there is chronic pulmonary congestion (heart disease, renal trouble, chronic bronchiectasis, etc.) tuberculosis, as a rule, does not develop. This is Nature's classical example which furnishes the therapeutic indication for Bier's hyperemia in such a variety of conditions. In some cases of pulmonary tuberculosis Bier's hyperemia induced by a suction-mask has been found very serviceable. So much for the treatment of the person who suffers occasional attacks of asthma.

The Treatment of the Asthmatic Attack must necessarily be symptomatic.

Here we are not removing a cause, but trying to relieve a distressing symptom. Those of my readers who have studied previous lessons will have no trouble in understanding the following therapeutic directions which are applicable to the attack, not to the condition:

1. Galvanization or faradization of the vagus for ten minutes. This is a very effective remedy.
2. Percussion of some of the respiratory centers located in its spinal cord. Percussion may be produced by tapotement, by a percussion-hammer, by a powerful interrupted douche (preferably cold), and static sparks, if a static machine can be had.
3. Derivation to the lower extremities according to any one of the many methods mentioned. Kneipp's "walking in wet grass" enjoys a well-merited reputation in this connection.
4. Thoracic gymnastics (Swedish methods) discreetly applied, as described in a previous lesson. The object is to prolong and intensify inspiration and to shorten expiration.
5. When the heart is sound, thermic shocks can be safely administered. A plunge-bath is not without danger but often wonderfully effective in breaking up an attack. The same holds good in regard to all "reactive" general applications of heat and cold.

OTTO JUETTNER.

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SOME PNEUMONIA COMMENTS

One of our recent lessons was devoted to a study of pneumonia. In the "comments from the class," members of which report below, we give some outline of the ideas of those who have had extended experience in its treatment, especially by the alkaloidal method.

We hope that students will comment freely on every lesson. These "talks" we consider one of the most interesting features of our Post-Graduate Course. Will not every one "chip in" with a word or a suggestion.

Treatment of Pneumonia.—Dr. John Stewart of Monon, Indiana, gives his method of treating pneumonia as follows:

"I always clean the alimentary tract, giving small doses of calomel or calomel and podophyllin combined, followed by a saline or some preparation that will take the place of the saline. Then I apply over the lungs, and well up over the neck, flannel wrung out of a hot epsom-salt solution, using one ounce of epsom salt to each pint of water. Formerly I used antiphlogistine, but I find the epsom-salt solution more satisfactory.

"In respect to medication I depend upon the indications. In the first stage there is usually an active condition of the circulation, the pulse, strong, full and bounding. This is the indication for veratrum. I generally use Norwood's tincture, or a combination of veratrum and opium. Teaspoonful every hour till the temperature is down to 100° F., then every hour. The paregoric is for its effects upon the heart. It also relieves the cough.

"When the case is one between the asthenic and sthenic, it is well to combine aconitine and veratrine and digitalin. The fever is thus controlled and the heart sustained.

"I always give strychnine in small doses with the sedatives. It may not appear theoretically correct, but the clinical results are satisfactory. We need to beware of using veratrum on fat people on account of their heart's condition.

"When the pulse is small and frequent showing that the heart's action is defective and that it is seeking to make up for lack of power by its frequency, aconite or aconitine should take the place of veratrum. Aconite given in this way, is not a heart depressant.

"If the skin is dry and parched I give pilocarpine nitrate in 1-67-grain doses every half hour till the skin becomes moist. It has never failed me in this respect.

"Outside the above I seek to meet the indications as they arise. If the tongue is covered with a dirty, pasty, white-furred coat, indicating excessive acidity, I give sodium sulphate. If the tongue is dry and full and red, indicating excessive alka-

linity, I give hydrochloric acid to overcome this condition. When the tongue has a moist, yellow, pasty coating, the breath fetid, chlorate of potassium will correct this condition.

"As soon as resolution begins, I begin to give ammonium chloride in 10-grain doses. This aids in dissolving the material plugging the bronchioles and stimulates the system."

Other Suggestions on Pneumonia.—Dr. W. P. Barron of Carmona, Texas, has presented an interesting paper on pneumonia and among other things says regarding the treatment of pneumonia:

"Given a typical case of pneumonia, after unloading the bowels, and giving a hot all-over sponge bath of epsom-salt solution, I give aconitine, gr. 1-134, digitalin, gr. 1-67 and cactin gr. 1-67 every half hour until effect, then less often. In case my patient shows weakness I add strychnine arsenate, gr. 1-134 or gr. 1-67, to the above. If the fever be very high I add veratrine, gr. 1-134 to gr. 1-67. If cerebral symptoms are present I give gelsemine in dose sufficient to quiet. If dull and stupid, with cold extremities I use atropine. I apply Lloyd's libradol to the chest, renewing if needed and push the sulphocarbonates dissolved in hot water. I give bryonin if the pain in the side be severe, sometimes with morphine. I use the epsom-salt baths every three hours. At night I give enough chloral to produce quiet sleep. Cactin will eliminate a distressing crisis if given throughout the disease. I have tested it many times. (But remember! Up to date it has never killed a dog, nor has a guinea pig been called to his long home by it.) I see that the patient has plenty of fresh air, water and nourishment."

Dr. Barron cites the following case which looks very much as if he had aborted pneumonia in one instance anyway. The doctor is a firm believer in so-called abortive treatment of pneumonia. We quote his exact words:

"An old lady, 80 years of age, with pneumonia, was one of the cases that helped to convert me to the alkaloids. She had been ill four days when I first saw her and I

thought her practically dead. I gave her dosimetric trinity and glonoin, a granule each every half hour for twelve hours, the temperature falling in that time from 105° to 102.6° F. I gave it then every hour until the pulse came down to from where I couldn't count it to 78. In two days she was free from fever and almost well. The granules were given in hot water each dose. Three doses of castor oil were also administered the first day, followed by sulpho-carbolates regularly throughout the case. Fortunately I have not had a case occur in very young children. If I should I would treat it upon alkaloidal principles.

"Every year I have cases showing typical clinical pneumonia. Alkaloidal treatment pushed to effect aborts these cases in from twenty-four to forty-eight hours. This leads me to the opinion that any pneumonia case taken in time may be aborted, with the exceptional cases found in all disease conditions."

Some Pneumonia Cases.—This month we have some very interesting reports from doctors, giving their treatment of pneumonia and citing cases. Dr. W. Herington, of Green City, Mo., reports the following cases:

"March 18, 1910, I was called to see a young fellow who had had the measles, and I took the temperature, which was 105° F., and lung examination showed bronchial breathing, anterior and posterior, in the right upper and left lower lobe with pain accordingly. Respiration 42 per minute. Tongue furred, whitish-yellow, breath offensive and a very aggravated cough. I said catarrhal pneumonia and here is the way I fixed it. I gave 1-6 grain podophyllin every hour till the bowels acted freely, then I ordered a saline cathartic. For fever, aconitine and digitalin, gr. 1-134 each every thirty minutes until the fever came down and pulse came to 80. The pulse was 120 per minute. After ten hours, pulse 72, temperature 99° F. Bowels acting freely and now he is convalescing nicely. I also gave calcidin, 1-3 grain every hour.

"Another case, an old lady 72 years old. I diagnosed the case as one of catarrhal pneumonia. There was muttering and de-

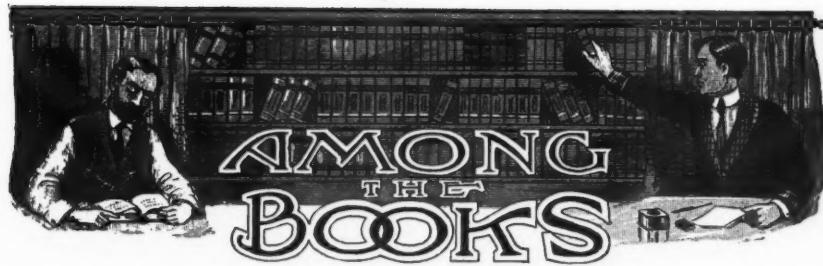
lirium and delirium, with loss of control of sphincters for ten days. Tongue heavily coated and 'dry as a bone' and cracked till almost bleeding; temperature 99.1° to 101° F. Well, if that wasn't a stunner where do you find one? I ordered castor oil and oil of turpentine every evening, eggnog every two hours with whisky, strychnine gr. 1-67 and four drops of nuclein every three hours; 5 grains of chloral hydrate were given every hour till quiet. The bowels just simply opened up and *run* and I said, 'Let 'em go,' and gave more oil, turpentine and more nuclein and whisky and now she is well."

Next Month Tuberculosis.—We shall study pulmonary tuberculosis in our Post-Graduate course next month. Short articles to appear in these columns will be welcomed. Bring in your share to our feast of good things.

EXAMINATION QUESTIONS

[NOTE.—The questions are purposely limited in number, because we desire to ask our students to treat the various individual questions quite fully, in their replies.]

1. Discuss the various conditions which may produce asthma, and give the most important points for differential diagnosis.
2. What is the difference between primary and secondary asthma? Is the term "Primary Asthma" ever justified?
3. What forms of asthma are not in great danger of being complicated with tuberculosis? Why?
4. What therapeutic inferences may be drawn from the facts alluded to in question 3?
5. Give the treatment of asthmatic paroxysms.
6. What danger is there in limiting the treatment of asthma patients to the paroxysms?
7. Give the general drug treatment of asthmatics.
8. Give an outline of the general management of such cases.
9. Give the dietetic management of such cases.
10. Describe one case, which you have seen.



JOHNSON'S "SURGICAL" DIAGNOSIS"

Surgical Diagnosis. By Alexander Bryan Johnson, Ph. B., M. D., of Columbia University Medical College. Volume III. The Spine, The Nerves, The Pelvis, The Extremities, Appendix. With one colored plate and two hundred and seventy-four illustrations in the text. New York and London: D. Appleton & Co. 1910. Price \$6.00.

This volume concludes the monumental work of the author upon which he labored for twenty-five years in the best place where surgical diseases and injuries are most apt to occur, namely, in New York City and in the hospitals where one who is prepared for it, as this author eminently is, can study them. Sold only in complete sets.

EDWARDS' "PRACTICE OF MEDICINE"

A Treatise on the Principles and Practice of Medicine. By Arthur R. Edwards, A. M., M. D., of Northwestern University Medical School, Chicago. Second Edition, thoroughly revised. Illustrated with 100 engravings and 21 plates. New York and Philadelphia: Lea & Febiger. 1909. Price \$5.50.

In our review, last year, of the first edition of this book (page 433) we said: "This book is written for the practising physician whose aim is, as it always should be, the cure or alleviation of disease. The author strives, in treating each disease, to give the pathologic etiology of it and the proper therapeutics to meet it. It is in every way

a modern treatise, built on the scientific observation of disease."

With this noble ambition to be useful to his kind—as a born physician can be most (*medicus nascitur, non fit*)—the author revised his work, and we have to thank him for this. We rejoice that he has caught the advancing sound-waves of suffering humanity crying for therapeutics, more therapeutics without less of other medical knowledge, to the constant increase of which he has been assiduously attentive. And so we have Dr. Edward's book up to all that is good and true and reliable in our work for humanity.

THOMPSON'S "DIETETICS"

Practical Dietetics, with Special Reference to Diet in Diseases. By W. Gilman Thompson, M. D., of Cornell University Medical College. Fourth Edition, illustrated, enlarged and completely rewritten. New York and London: D. Appleton & Co. 1909. Price \$5.00.

That the *materia alimentaria* is as important as the *materia medica* ought always to have been accepted as an indisputable truth is indisputable at the present day. And there are people that go even further and claim that diet can *cure* disease without medicine. To this class the author and the book before us does not belong, as he says, in the preface: "The author disclaims advocacy of any special dietetic theory or 'system.' No one food is curative of any disease, just as no one food may be said to be causative to any disease." Yet he has given us four editions of his excellent book

since 1895, and the present the best of them all.

This octavo book of some 900 pages, comfortably printed, contains an amount of information about foods, their origin, production, preparation, suitableness in health and disease or convalescence which can not but be welcome to the progressive physician of today.

The author divided his subject into nine parts, which are as follows: (1) Foods and food preparation. (2) Stimulants, beverages, condiments. (3) Cooking, food preparation and preservation. (4) Special conditions influencing foods. (5) Food digestion and conditions affecting it. (6) General relations of food to special diseases. (7) Administration of food for the sick. (8) Diet in disease. (9) Rations and dietaries. In the latter chapter the author shows his decided nonsectarianism and his distance from the evil spirit of ipsedixitism. The book concludes with a valuable appendix. We augur for this book a hearty reception by the medical profession, both at home and abroad.

"AMERICAN PRACTICE OF SURGERY"

American Practice of Surgery. A Complete System of the Science and Art of Surgery by Representative Surgeons of the United States and Canada. Editors: Joseph D. Bryant, M. D., LL. D., and Albert H. Buck, M. D., Complete in 8 volumes, profusely illustrated. New York: William Wood & Co. 1909. Price \$7.00.

Volume VI of this collective work, now before us, continues with "Regional Surgery," which began in the preceding volume with the surgery of the head and left off with that of the larynx and trachea. In the present volume are considered the work of prosthesis in the regions of the face, mouth, jaws, and nasal and laryngeal cavities, and further the surgical diseases and wounds of the nasal cavities and accessory sinuses. The anatomy of these parts is reviewed, and transillumination and the use of the x-ray also are discussed. Then come surgical diseases and wounds of mouth, tongue

and salivary glands, the same of the neck, thyroid and thymus; surgery of the thorax and spinal column; surgical diseases and wounds of the female breast; the same of the male genital organs, including chancroid and gonorrhreal urethritis; lastly, surgical diseases and wounds of the jaws.

Notice is given that the articles by the late Dr. McCosh on the "Treatment of Infectious Peritonitis and Appendicitis" will appear in Volume VII. The work proceeds undiminished in its excellency and comprehensiveness, as was promised from the very beginning.

CABOT'S "PHYSICAL DIAGNOSIS"

Physical Diagnosis. By Richard C. Cabot, M. D., of Harvard University. Fourth Edition, revised and enlarged. With 5 plates and 240 figures. New York: William Wood & Co. 1909. Price \$3.00.

The author gives in this book only that which he knows from his own experience, which is a great deal, and comprises the subtle and refined methods and keen perception of the senses up to which modern clinicians have brought the art of diagnosis. He says he does not say anything of cystoscopy, ophthalmoscopy and laryngoscopy, because he is not personally acquainted with those methods, but he believes that familiarity with the latter will sooner or later be required of every internist. The author does not copy from other books about which he does not know into his own. An author who does not figure as a knowallist is most to be confided in.

KIMBER'S "ANATOMY AND PHYSIOLOGY FOR NURSES"

Anatomy and Physiology for Nurses. A Textbook Compiled by Diana C. Kimber, Graduate of Bellevue Training School. Third Edition. Revised by Carolyn E. Gray, Assistant Superintendent, New York Training School for Nurses. New York: The MacMillan Company. 1909. Price \$2.50.

This textbook for nurses is of a higher order of instruction and is designed for

persons having had a preparatory education in high schools and who have a taste for study. Of the true scientific nurse the same must be said as what is true of the physician, namely, he is not made but is born. For such a one this book is admirably suited. A self-made nurse like a self-made man is usually badly made.

SNOW'S "MECHANICAL VIBRATION"

Mechanical Vibration and Its Therapeutic Application. By M. L. H. Arnold Snow, M. D., of New York School of Physical Therapeutics. New York: Scientific Authors' Publishing Company. 1904. Price \$2.50.

This book has been written "to call attention to the fundamental principle" of massage, which may give reason for or against mechanical-vibration apparatus. From this point of view the book is very valuable as it is thorough in words and illustrations.

CORNER'S "DISEASES OF THE MALE GENERATIVE ORGANS"

Diseases of the Male Generative Organs. By Edred M. Corner, M. D., B. Sc., of St. Thomas' Hospital (London). London and New York: H. Frowde, Oxford University Press. Price \$1.50.

This book is one of the excellent medical manuals published by the Oxford University Press of London and its extensive branch in New York City. As there ever is a predection in human nature for things "of our own," it is well to remember that there is always room in him who has learned much to learn in addition some good things from abroad. The German fully appreciates what he learns from abroad, and so when wishing to deprecate anything he says, "*Es ist nicht weit her*" ("It does not come from very far"), while, on the contrary, the English in his depreciation of anything says, "It is far-fetched."

The redeeming feature of our much-mixed-up and much-and-everything-questioning age is its ever-growing cosmopolitanism and of which the publications of the Oxford Uni-

versity Press may be accepted as a gratifying token. The little manual before us is an excellent little token of that token, and the general practitioner as well as the surgeon and specialist will find in it much valuable matter for appreciation.

The author has selected the following topics for consideration: (1) Hydroceles and hematoceles. (2) Physiology of the testicle. (3) Wandering, or movable, testicle. (4) Imperfectly descending testicle. (5) The testicle in relation to blood supply, ducts, inflammation and operations. (6) Atrophy and hypertrophy of the testicle. (7) Torsion of the testicle. (8) Epididymitis, orchitis, and other diseases of the testicle. (9) The functional affections. (10) Spermatic-cord diseases. (11) Diseases of the vesiculae seminales. (12) Diseases of the urethra. (13) Diseases of the prepuce and penis. (14) Diseases of the scrotum. These topics are illustrated with 41 drawings. This manual is a *parvum* containing *multa*.

POYNTON'S "HEART DISEASE"

Heart Disease and Thoracic Aneurism. By F. J. Poynton, M. D., F. R. C. P., of the University College Hospital. London and New York: H. Frowde, Oxford University Press. Price \$1.50.

This book gives in outline the most modern clinical methods of investigating cardiac troubles, acute, chronic and congenital, besides prescriptions for treatment.

WHARTON'S "MINOR SURGERY"

Minor and Operative Surgery and Bandaging. By Henry R. Wharton, M. D., Surgeon to the Presbyterian Hospital, Philadelphia. Seventh edition, enlarged and thoroughly revised. With 555 illustrations. Philadelphia and New York: Lea & Febiger. 1909. Price \$3.00 net.

"*Tempora mutantur, nos et mutamur in illis.*" There was a time when an amputation of the thigh anywhere or at the hip-joint would not have been considered as *minor* surgery, nor would have been operations on the stomach and abdominal viscera.

But Dr. Wharton devotes many and many a page to the surgery of these organs in his excellent book on *minor surgery*. However, it is better to provide the student and general practician with too much rather than with too little, provided the provisions are good, and what Dr. Wharton presents is excellent. But if we were to give the Doctor a special encomium it would be for his chapters on asepsis, bandaging, and bacteriology.

SNOW'S "THERAPEUTICS OF LIGHT AND HEAT"

The Therapeutics of Radiant Light and Heat and Convective Heat. By William Benham Snow, M. D., late Instructor in The New York Postgraduate School. New York: The Scientific Authors' Publishing Company. 1909. Price \$2.00.

An important book on an important subject in light- and heat-therapy, with which the progressive physician has nowadays to be acquainted if not familiar. The old convenient and therefore inabrogatable medicamentous remedies, like all good rules, have their exceptions too, owing to objective and subjective reasons both in physician and patient. The physician at the bedside is like a strategist confronting an enemy's host and he must have various arms ready at hand and be ready to call them into action opportunely. This book gives information about the arms of light and heat, and the information is reliable and up to date, but gives no guarantee against possible change and better information still.

MEYER'S "BIER'S HYPEREMIC TREATMENT"

Bier's Hyperemic Treatment in Surgery, Medicine and the Specialties. A Manual of Its Practical Application. By Willy Meyer, M. D., of the New York Post-graduate Medical School and Hospital, and Victor Schmilden, M. D., Assistant of Professor Bier at the University of Berlin, Germany. Second Edition, revised and enlarged. Illustrated. Philadelphia and

London: W. B. Saunders Company. 1909. Price \$3.00.

Bier's method is yet *sub judice*, and so the wide-awake general practician, to whom this method is of special promise, should welcome every further information on this subject, as this second edition gives.

HARE'S "PRACTICAL THERAPEUTICS"

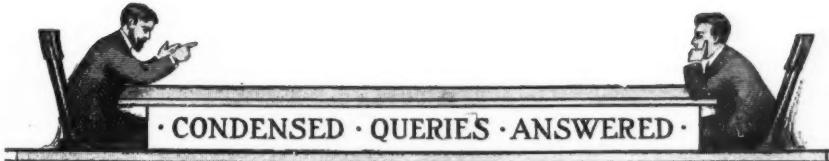
A Textbook of Practical Therapeutics, with Special Reference to the Application of Remedial Measures to Disease and Their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., B. Sc. Thirteenth Edition, enlarged, thoroughly revised and largely rewritten. Illustrated with 122 engravings and 4 colored plates. Philadelphia and New York: Lea & Febiger. 1909. Price \$5.00.

There is no need of anyone's writing an encomium on this book. There will be but few educated physicians of any school in this country who do not know Hare's "Therapeutics" or at least know of it from reference to it in medical literature. All we need to say is that the author brought this edition up to the very date it went to print. Hare is reliable, sympathetic, and a true born physician and medical teacher.

HORT'S "IMMUNIZATION"

Rational Immunization in the Treatment of Pulmonary Tuberculosis and other Diseases, comprising a paper read before the Royal Society of Medicine, March, 1909. By E. C. Hort, B. A., B. Sc. New York: William Wood & Co. 1909. Price \$1.00.

This work comprises the discussion of the following subjects: (1) Relation of treatment by inoculation to other methods of treatment. (2) Critical review of the present position of heteroinoculation. (3) Unreliability of the tuberculoopsonic index as at present estimated. (4) Autoinoculation, spontaneous and artificial; history; value and limitation. (5) Autolysis, autolytic toxemia. Antiautolytic defense. The antitryptic index.



PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

QUERIES

QUERY 5576.—"Castration Under Stovaine Anesthesia." O. B. W., Virginia, desires to know whether he can, under local anesthesia with stovaine solution, without giving chloroform, remove a testicle without pain or danger to the patient. He fears the volatile anesthetics owing to the age and condition of his patient.

Unquestionably you can use such a local anesthetic and castrate your patient without causing pain or placing him in danger. It would be necessary, however, to produce hyoscine-morphine narcosis first. Read the special literature on this subject and closely follow the technic outlined.

If the patient is only lightly narcotized, inject the stovaine solution *into* the cutis (not into the subcutaneous tissue), along the line of the intended incision. Wait three or four minutes, then incise the skin and infiltrate the underlying tissues. The patient possibly may move a little as if feeling pain when the cord is tied or the testicle enucleated, but an hour later he will not be conscious of having suffered pain. The sharp command, "Lie still now," will be obeyed by him. You can, of course, give a whiff or two of chloroform just before making the primary incision. But if you do this you will not need to use a *local* anesthetic at all. As a matter of fact, we should not attempt to remove the testicles under local anesthesia alone. The patient necessarily would be more or less conscious of distress, and mental shock is undesirable.

QUERY 5577.—"Burn from Live Wire." O. W. H. Illinois, is treating a boy who

sustained a burn $2\frac{1}{2}$ by $1\frac{1}{2}$ inches in extent on the occiput from a live wire. He failed to get skin for graft and still has a dime-sized wound that persists. Various dressings have been used, most recently protoneuclein and later bovinine on iodoform gauze. A treatment that will complete the healing process is desired.

Cleanse thoroughly with hydrogen-peroxide solution; cut away or curet any necrotic tissue or sloughing floor; then apply pure oil of turpentine (Merck) with a camel's-hair brush; snugly fit into the ulcer a piece of gauze saturated with oil of turpentine, cover with another pad of gauze, a handful of cotton and a snug bandage. Repeat this dressing daily until granulation is established and the edges close in. Now place a few pin-point grafts upon the surface, after cleansing with boric-acid or normal salt solution (taking these "pin-point" grafts from the thigh or the arm of the patient). After placing them, flood the area with bovinine or sanguiferrin, cover with a piece of rubber tissue or oilsilk perforated freely with pin-holes; over this lay a piece of gauze soaked with the bovine blood, then another piece of rubber tissue or oilsilk (unperforated), and bandage in the usual manner. Dress twice daily (not removing the perforated tissue unless signs of secretion or pus are evident), and then every second day, with great care, catching one corner of the tissue with a pair of forceps and "floating it up" with boric-acid solution thrown under it with a dropper.

To secure the skin for grafts take a long, sharp needle or a fine bistoury and catch

the skin and lift it up. Then with a pair of small scissors snip off a little point, using the curved scissors, and lift the minute particle of skin directly onto the wound, raw surface down. These grafts should set about one-eighth inch apart. Thus, if you do the work right, nine out of ten of them will live.

QUERY 5578.—“Regarding Bull-nettle—W. J. H., Nebraska, desires information about bull-nettle. “I was told by a physician,” he writes, “that it is a ‘wonderful remedy.’ I can’t find it mentioned in any of my books, and am satisfied if it is worth having, you have it; and if you do, I want to know all about it.”

There has been written considerable in these columns, in the past, on bull-nettle. Burgess recommends this drug very highly in the treatment of syphilis, but we have tried out his preparation and cannot say that it proved particularly effective.

Solanum carolinense (the horse- or bull-nettle) contains two active constituents (alkaloids) existing together to the extent of about 1.3 percent in the fruit, and of 0.4 percent in the root, about two-thirds of these appearing to be solanine, while the remaining one-third has been called solanine by John Uri Lloyd. Small quantities of a peculiar resin and volatile oil also occur. Solanine (the alkaloid) is unquestionably the active principle and will, we believe, produce any therapeutic results obtainable from any preparation of solanum carolinense. This plant is also known as the “apple of sodom,” band-brier or tread-leaf, and is fairly common throughout North America. Cattle in the southern states are frequently poisoned from browsing upon the herb. If you desire to go further into this matter, you might address Dr. Burgess, Avondale, Tenn., for literature on bull-nettle. It might interest you also to read the doctor’s book, the “New Field.”

Burgess states that the “buli-nettle” he refers to is jatropha stimulosis, which would make it a member of the spurge family (euphorbiaceæ); yet in his books he says, “Jatropha stimulosis (bull-nettle) is a

species of solanum, and some say identical with solanum carolinense.” Purslane-spurge, purging parsley, apple-root, or *E. corollata*, is the most-widely found and best-known member of the spurge family. It is emetic-cathartic. However, none of the spurge family at all resemble solanum carolinense or any solanum plant. For description of these drugs see the Dispensatories, or other reliable textbook.

QUERY 5579.—“Tasteless and Hypodermic Cathartics.” F. G. T., Florida, wants to learn of the most nearly tasteless cathartic, the best hypodermic cathartic, and the most effective purgative.

Phenolphthalein is a cathartic that practically is tasteless. As to a hypodermic cathartic, there is no really satisfactory one. We have experimented extensively in this direction, and while finding that arecoline acts beautifully in veterinary practice, this drug should not be given to human beings. Magnesium sulphate (C. P.) 2 grains dissolved in plenty of sterilized water, may be thus administered and is said to produce fairly copious stools in a short time. Recent experiments, made by Abel and Rowntree, show that phenolphthalein and its tetrachlor derivative, phenoltetrachlorphthalein, are quite effective and nonirritant hypodermic (or intravenous) cathartics when used in oil-solution. A solution of phenoltetrachlorphthalein containing 0.4 Gm. (6 grains) induces a laxative action lasting from four to six days. This substance is excreted by the liver only, being reabsorbed from the bile solution by the large intestine. This probably explains its prolonged or “cyclic” action.

“What is the most effective purgative?” This question must be modified before an intelligent answer can be offered. Conditions necessarily control the selection of the drug, while a remedial agent which might prove the most effective purgative in one case might fail in another. For instance, calomel and podophyllin (or blue mass and soda with podophyllin) in small divided doses is the purgative most often indicated, and this combination is nearly always

effective. Then, again, however, apocynin or elaterin may prove the most effective, while in another instance we possibly will be inclined to depend upon castor oil with or without the addition of croton oil.

QUERY 5580.—“Supposed Ptomaine Poisoning.” J. J., Iowa, describes the case of a man about 45 years of age who while in the West “got ptomaine poison from eating mutton,” and was very sick for two weeks, when he returned home. In about one week he came down with a chill and high fever (104° F. temperature). Two weeks after he had another attack, and this time there was some vomiting. His skin is copper-colored. His abdomen becomes bloated badly every day, no matter what his diet; but he feels like eating almost any time. The first time he was taken sick his stomach was washed out and bowels were thoroughly cleansed, the latter having been kept active since. After having the chill for several days, his lips and finger-nails were blue. He is up and around except when he has the chills and fever. “His chills are a great deal like the ague chill.” He is stronger than a month ago. At the time of his chills he has been given quinine, hydrastine and strychnine; the bowels were opened up with calomel followed by a saline laxative. The quinine and hydrastine did good at the time, but other preparations for the bowels did not prove effective. Copper arsenite was given, but there does not seem to be much improvement.

A case of ptomaine poisoning is, as a rule, either cured or it passes beyond the administration of the physician within forty-eight hours. There is something more than “ptomaine poisoning” here, and we would strongly urge you to send to the laboratory, for examination, a specimen of urine, and a blood smear. Addison’s disease must be thought of. Examine the buccal mucosa and palpate carefully the liver and spleen; state the areas of dulness. It might be well to send a specimen of the stomach-contents (secured an hour after the regulation test-meal of toast and tea) for chemical and microscopical examination.

On general principles give, in this case, blue mass and soda, with iridin and leptandrin, half-hourly for four doses, every second night for a week. Quinine hydro-ferrocyanide, berberine, nux vomica, and capsicum every three hours; euonymin and chionanthin before meals; a laxative saline every morning on rising. Hot salt sponge-baths will prove helpful.

QUERY 5581.—“Administering Nuclein in Discs.” E. P., New York, writes: “Can I saturate sugar-of-milk tablets with the nuclein solution and not injure the property of the medicine?”

Yes, there is absolutely no objection to this procedure. Homeopathic “discs” are frequently utilized in this way. However, it is infinitely better to employ tablets which contain a definite amount of sodium nucleinate in a portable form or to drop the solution itself (with a dropper) under the tongue of the patient, allowing it to be absorbed from the buccal mucosa.

QUERY 5582.—“The Treatment of Stricture.” F. E. W., Mexico, asks, what, if any, are our especial methods for the reduction of stricture, other than electric cautery.

Some strictures can be cured by gradual dilatation, together with the use of bougies consisting of thiosinamin, papayotin and glycerole of pepsin. We are experimenting with a formula which we believe will prove extremely efficacious.

Thiosinamin injections should be given only when the fibrous form of stricture exists. Strictures can also be destroyed by the galvanic current. (If you have a copy of “Alkaloidal Practice,” refer to page 616.) The treatment called for in spasmoid stricture naturally would not be effective in the fibrous (cicatricial) type. Mild inflammatory conditions with engorgement of a limited area of mucosa will yield to eliminants, sedatives, the injection of a solution of lobelin, and the passage of cold steel sounds. In hyperesthetic conditions arbutin, eupurpurin and scutellarin should be given a trial. Thymol iodide in olive oil is applied locally with advantage. Carben-

zol or ichthyl are extremely useful in the earlier stages of stricture. They may be applied even after section with the urethrotome.

QUERY 5583.—“Infantile Eruption.” J. M. S., Michigan, was called to see a baby nine months of age, who has two teeth. She had a “breaking out on several places, under one arm, on thighs, on neck and face, in size from a pinhead to that of a dime. The skin breaks, a scab forms, and it heals in three or four days.” The doctor wants to know whether the eruption is caused by teething. Bowels are constipated, suppositories or laxatives being used every day. Otherwise the child seems perfectly healthy.

It is impossible for us to prescribe very intelligently for the infant without a much clearer idea of conditions. Eruptions frequently occur during teething and are due as a rule to autotoxemia. It would be well to examine the baby’s food closely. It may be that she is overfed, or getting too much starch. An examination of the urine will probably reveal a disordered body-chemistry.

A few doses of calomel with aromatics, followed by “saline lemonade,” will help out. Minute doses of sulphur and podophyllin two or three times daily also seem to be indicated. There are few derangements of the human body which are not caused, at least to a certain extent, by some gastrointestinal disturbance.

With the digestive tract swept free from fecal and effete matter and presenting a clean absorptive mucosa, we are restoring normal conditions in one of the most important working parts of the body mechanism. If at the same time we secure skin and kidney activity, and see to it that the system does not receive more food material than it can take care of properly, we are going a long way toward establishing perfect health. This rule applies particularly in pediatrics.

QUERY 5584.—“The Economy of the Alkaloids.” H. E. T., Indian Territory, considers the alkaloids “very nice.” There is, he says, only one objection, and that is the price. “To illustrate: Of specific

echinacea I add, as a rule, 1 dram to a 3-ounce mixture, dose one teaspoonful. If I were to use your granules of 1-2 grain, it would take 60 to equal the 1 dram of the fluid extract, costing more than 6 cents, while the former would be less than 3 cents. It looks to me as if I could practically double my expense account on drugs. If I am in the wrong, I want to be put right, as you have many drugs listed that I desire to use every day.”

As a matter of fact, Doctor, the alkaloids are the most economical medicinal preparations obtainable today. In the first place, they are *absolutely* and *evenly* effective. Each granule may be taken, as we have pointed out elsewhere, to represent the smallest known-to-be-effective dose for an adult. If instead of treating named diseases you diagnose closely and give for the pathologic conditions present the indicated remedies in small repeated doses to effect you must get results—and rapidly. Your selection of echinacea as a basis of comparison is rather unfortunate. In the first place, this is a concentration, *not* an alkaloid or glucoside, and therefore cannot be considered representative. However, one tablet equals 10 minimis of the fluid preparations, and two to three tablets, would be an *average* full dose. That means 33 doses for 15 cents. Not “very expensive,” convenience and quality considered, is it?

The positive therapist using definite doses of dependable remedies cures his patients in one-third the time usually consumed by the old-style practitioner. Indeed it is not at all uncommon for his typhoid or pneumonia patient to be ready for discharge in a week. You know how long patients remain under treatment when treated in the regular way. These are the days when people want to be “shown;” when even sick people demand results. As a consequence it is the doctor who “does things” and who does them with the least medicine who gets the practice. It need not be pointed out that the man who gets the practice also gets the money.

Further, we would point out the fact that by absolute count not less than fifty thousand

physicians are using the alkaloids. Of these men thousands have frankly stated that success came to them with the adoption of the active principles, and almost an equal number have written at one time or another that the alkaloids save them money—not only save but make the dollars.

QUERY 5585.—“An Oklahoma Dirt Eater.” A. C. A., Oklahoma, is treating a twelve-year-old boy who eats dirt. He cannot find any mention of the disease in his books and asks what should be done for him. 1

The first essential is to eliminate thoroughly, to cut off the supply of “dirt,” and order plenty of nutritious foods. Before meals prescribe juglandin, 1-3 grain; hydрастин, 1-6 grain; strychnine arsenate, 1-134 grain (you may occasionally substitute for the latter nux vomica and capsicum); an hour after meals give pancreo-papayotin and 1 or 2 grains of calcium sulphocarbolate. Every second or third night order a hepatic stimulant, followed next morning by a laxative saline draught. Nuclein is indicated, and it may be given subcutaneously, absorbed from the buccal mucosa, or taken internally. Keep the skin active with frequent salt sponge-baths. A few initial doses of castor oil are desirable.

QUERY 5586.—“Obstinate Enuresis.” L. W. C., Oklahoma, desires treatment for a twelve-year-old boy who has been annoyed all his life with incontinence of urine. He is well developed, in every way rather large for his age, and full of life and vigor. All the common “bed-wetting” remedies have been tried, but with only temporary relief.

Before we can prescribe satisfactorily we must have a clear idea of the cause of the incontinence. It is essential that we first examine the patient and the urine. Indigestion, worms, spinal disease, stricture, fissure or fistula in ano, retention of fecal masses, or any one of many other abnormal conditions may cause enuresis. Adenoids, debility, adherent prepuce, undescended testicle, and hernia, each and all may cause persistent bed-wetting. On the other hand,

lithemia, diabetes, cystitis, or hyperacidity of urine may be the direct cause of enuresis, and all treatment would fail that did not take such causative condition into account. Enuresis diurna may even be due to eye-strain, the fitting of a proper pair of glasses putting a prompt end to the undesired flow. Also masturbation is a frequent cause of this trouble in both sexes. If none of these abnormalities can be discovered, we must look upon the disorder as a functional anomaly and try to improve the tone of the nervous system. That very simple medication suffices in these cases has been proved many hundred times.

It is essential, as you will note, to correct any abnormality, keep the bowels open, feed the child properly, and instruct it to attend to the bowel regularly. Water should be forbidden after six p. m. When the parents retire, the child should be aroused and urine voided.

Brucine and ergotin may be given half an hour before meals. Occasionally thuja may be added with advantage. Atropine valerianate may be given every four hours. Be sure that you have no ocular, gastric or rectal disorder. Exclude with particular care seat-worms or lumbricoides; also examine for a very long or tight prepuce. In addition we suggest that you read the chapter on Enuresis Nocturna in “Every-Day Diseases of Children.”

QUERY 5587.—“Oxaluria.” J. P. B., Massachusetts, forwards a specimen of urine for examination, marked C. J. M., with the following clinical data:

The patient for a year has had severe attacks of pain and vomiting resembling that of duodenal ulcer, and had been subjected, by one of Boston’s best surgeons, to an exploratory operation, at which a chronic appendicitis was discovered. Has experienced no trouble for about two months, but now has pain directly over the pubes, low down in the center, associated with rumbling of gas, this pain often growing severe; sometimes vomiting occurs. The bowels move four or five times daily, stools being, apparently, normal though rather watery. He

has to arise eight or nine times at night to urinate, there being pain in passing water, but none afterward. The stream sometimes stops suddenly; no other symptoms of gravel.

Unfortunately you forgot to indicate the amount of urine passed in twenty-four hours, so we are unable to estimate the total solids. There is an enormous amount of calcium oxalate, some pus, much mucin, a trace of indican, and marked hyperacidity. As you are well aware, the excretion of large quantities of oxalates bespeaks marked metabolic disturbances.

The first essential is to eliminate and restore functional activity. Giving diluted nitrohydrochloric acid (10 minimis in plenty of water with each meal), and strychnine, juglandin and boldine before meals, would prove beneficial. Order papayotin with charcoal after food, and for a week a teaspoonful of sodium bicarbonate and xanthoxylin one hour before eating, the powder to be taken dry on the tongue, followed by a glass of water.

The diet should consist of fruit, cereals, a very little meat, eggs, coffee or tea with plenty of cream, buttermilk (if it is fresh and good), and whole-wheat bread. Outdoor exercise is essential. Two or three nights a week give three or four doses of calomel, iridin and podophyllin at hourly intervals. Sponge-baths two or three times a week; warm saline enemata on retiring.

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QUERY 5588.—"Venereal Warts." M. F. S., Iowa, asks: "What is your treatment for venereal warts?"

A preparation containing salicylic acid, resorcin and calomel is very widely used and is efficacious in most cases. The proportions are salicylic acid, one dram; resorcin, thirty grains; calomel, two drams. This preparation is applied after cleaning the warts thoroughly with an antiseptic solution. If the growths are at all discrete, and small, seize in a pair of rat-tooth forceps and snip off with scissors, including in the cut a small portion of the tissues at the base. Before clipping off inject under the base a drop of a one-percent solution of eucaine or other

anesthetic. Touch the bleeding points with pure carbolic acid and dust with iodoform. If the warts present a large base, shave off level with a sharp, flat knife, curet the wound, then cauterize with carbolic or nitric acid and dress with calomel and zinc oxide, equal parts. Operate under general anesthesia. Oozing should be controlled by the application of compresses soaked in adrenalin-chloride solution. If the patient will not submit to operation protect the normal skin with vaseline, apply nitric acid to the warts, rub in well, dress with borated vaseline. Repeat the process every second day. Chromic acid in 10 percent solution may be brushed over the warts once daily. Thuja is, in our estimation, one of the best applications under ordinary circumstances. Keep the warts saturated with Lloyd's preparation of thuja occidentalis.

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QUERY 5589.—"Practical Diagnosis: Vasectomy." A. J. L., Kearney, Nebraska, wants to know where he can get a book on "practical diagnosis;" one that does not go into unnecessary detail, also information in regard to vasectomy?

The doctor will find a very interesting article on "Vasectomy" in *The Medical World* for February. There is no question as to the efficacy of the procedure. See answer to Query No. 5543, February number of *THE AMERICAN JOURNAL OF CLINICAL MEDICINE*. You will find Musser's "Medical Diagnosis" published by Lea and Febiger, Philadelphia, one of the most complete and authoritative works available. Boston's "Clinical Diagnosis," published by W. B. Saunders, is a somewhat similar work, but the contents are eminently practical and it makes an excellent reference book for the busy practitioner. Hare's "Practical Diagnosis" published by Leo and Wilson's "Medical Diagnosis" by Lippincott are also well worth possessing. Were we making a selection for our personal use we would choose Wilson's "Medical Diagnosis" and Boston's "Clinical Diagnosis." You cannot go astray, however, Doctor, if you purchase any one of the four volumes which we have named.